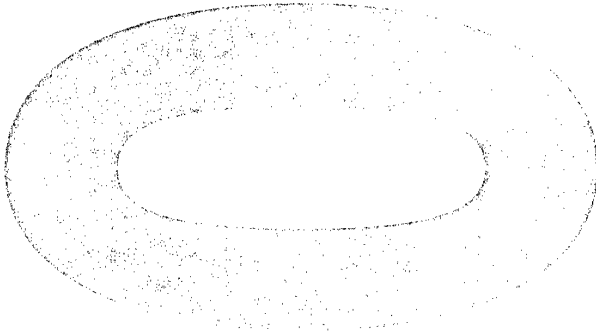




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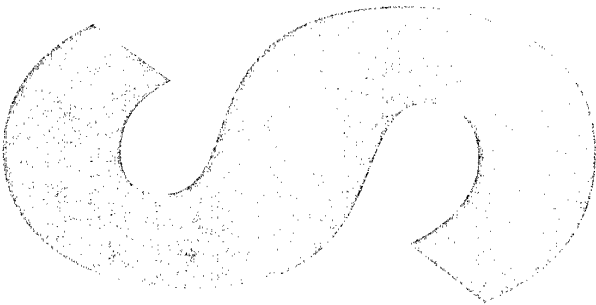
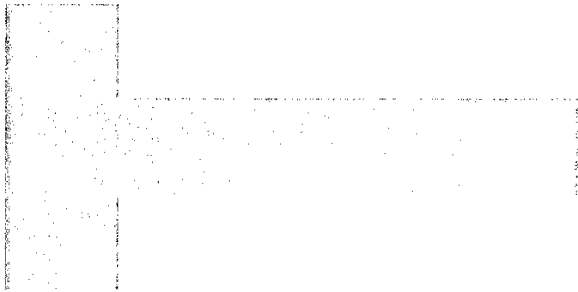
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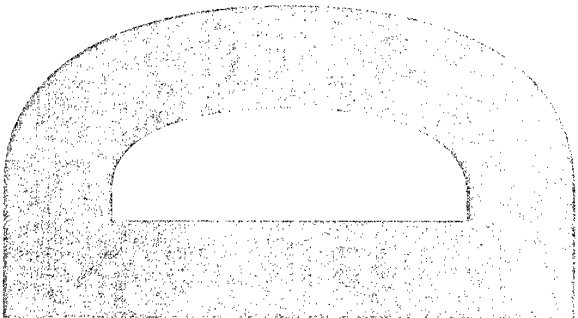
**Historical Analysis of
Population Reactions to
Stimuli - A Case Study of East
Timor**

Patricia Dexter

DSTO-TR-1553



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Historical Analysis of Population Reactions to Stimuli - A Case Study of East Timor

Patricia Dexter

Land Operations Division
Systems Sciences Laboratory

DSTO-TR-1553

ABSTRACT

This study provides a baseline investigation for determining population reactions to given stimuli in a historical context. Historical data analysis and qualitative data analysis techniques are applied to the last 500 years of insurgences on East Timor. Links and trends between events and stimuli as causes and triggers are drawn giving a preliminary dataset for any future trends impact analysis. In addition some general population reactions for East Timor are established.

RELEASE LIMITATION

Approved for public release

AQ F04-09-0835

Published by

*DSTO Systems Sciences Laboratory
PO Box 1500
Edinburgh South Australia 5111 Australia*

*Telephone: (08) 8259 5555
Fax: (08) 8259 6567*

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AR 013-033*

*Submitted: October 2003
Published: February 2004*

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Historical Analysis of Population Reactions to Stimuli - A Case Study of East Timor

Executive Summary

In military conflicts, the non-combatant population can have a significant impact on the outcomes, progress and effectiveness of the fighting or peacekeeping elements. This is particularly the case in urban areas where the non-combatant population is typically high. In addition, the Rules of Engagement (ROE) change in urban environments or where there is a risk to the population, and this can be exploited by threat forces to achieve a given end state or by elements in the population for their own cause. Additionally, the civilian population can be at risk from opposition forces with either different ROE to friendly forces or who exploit the ROE used by the other side. Although understanding the culture(s) of an urban population can significantly aid in communication and winning the "hearts and minds" of the population, understanding the stimuli as triggers and causes which have in the past caused (and hence might cause) the population to revolt or act in a particular way can give insights to how they might react in the future providing there are sufficient historical trends. These acts we will call "events". They may range from insurgences¹ through assisting or supporting one side or another in fighting to mass popular support of a political party or regime. The aim of this report is to undertake an historical analysis of stimuli (as cause and trigger) and effect trends between triggers, causes and events in the population of East Timor over the last 500 years.

This report provides a baseline study of the reaction of populations to imposed stimuli in a regional urban environment, which is likely to be encountered by Australian Military forces, from a fact-based perspective with no attempt to understand the cultural or sociological behaviours. The intent is to attempt to identify probable "generic" causes of the population reactions over a large time period and determine if there are links or trends in these causes over that time period. This may provide valuable insights to the reaction of this population and provides a basic dataset for input to training and wargaming as well as any future trend impact analysis. Additionally we determine the utility of this form of analysis for providing qualitative data on urban populations.

This report highlights several lessons of relevance to urban environments. Of interest is the importance the Timorese "memory" appears to play as a source for causes of new events. This report also shows for the Timorese population that the stimulus for an insurrection needs to be applied to areas where there is a sufficient density of the population for the event to have an effect. Therefore dispersing or isolating the population in an urban environment may be a mechanism for preventing or minimising significant events – although this could be construed as a negative action in itself. This baseline study has identified a series of trends which have been consistent over the last 400 years as contributory causes of events in East Timor. We show the utility of this type of historical

¹ Insurgences are defined as acts of insurrection, revolt or rebellion by the Macquarie Dictionary, Third Ed.

analysis in providing insights to population reactions to given stimuli. This may also provide potential data in an appropriate format for any forecasting techniques such as trends impact analysis. There is no clear evidence of the spread of rebellions in any direction or location over time however; in general it appears that these reactions can occur wherever there are centres of population.

An important outcome of this analysis is the identification of different "populations" (in terms of ethnicity, religion and education demographics) in East Timor over the last 500 years who have had similar reactions to applied stimulus. That is, for a similar or related set of causes, the different populations (ethnicity, religion, education) have reacted in predominantly the same way, in most cases they rebelled. It appears that over the history of the island, if there was no stimulus to the population, there was no change in the status quo. It is not possible to determine how often the stimuli occurred without triggering an event as these situations are of little general interest and hence not reported or recorded throughout history. This information would also provide valuable insights to the reaction and behaviour of the population for comparison.

Author

Patricia Dexter

Land Operations Division

Patricia commenced at DSTO in 1999 in Land Operations Division. Her background is in Chemistry and Spectroscopy. Her current interests lie in the analysis of urban cultural environments and in historical data analysis. She is currently working as an Operations Analyst in Concept Studies and Analysis discipline of LOD.

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Glossary

Cause	Underlying factor which fuels an event
ETPS	East Timor Police Service
Event	Insurgence; assisting or supporting one side or another in fighting; mass popular support of a political party or regime
<i>fintas</i>	Initial loyalty tax system introduced into East Timor in 1710-14 by the Portuguese
Fretilin	Frente Revolucionária de Timor Leste Independente (Revolutionary Front for Independent East Timor)
Insurgence	riot, rebellion or revolt
INTERFET	UN sanctioned International Force for East Timor 1999-2000/1
<i>liurai</i>	King of a <i>reino</i>
<i>moradores</i>	Native Timorese militia/soldiers used by the Portuguese
Negative influence	population reaction to stimuli where violence between population or to others occurs (eg population attacks a part of a town)
OR/OA	Operations Research / Operations Analysis
Positive influence	population reaction to stimuli where no violence occurs or peaceful mass support or assimilation occurs (eg new religion is accepted and adopted by the population and there is no violent reaction or changes to everyday life). Could be considered a non-negative influence
<i>reinos</i>	Kingdom in East Timor headed by a liurai
ROE	Rules of Engagement
Stimulus	Trigger or cause of an event ; factor which prompts an event to occur
<i>topasse</i>	catholicised mixed race descendants of original Portuguese settlers and native Timorese
Trigger	Factor which forces an event to occur – may be the same as a cause
UDT	União Democrática Timorense (Timorese Democratic Union)
UN	United Nations
UNMISSET	UN Mission to East Timor (May 2002 – 2003) post independence stabilisation force
UNTAET	UN Transitional Administration in East Timor (2000-May 2002)
WWII	World War II

1. Introduction

In military conflicts, the non-combatant population can have a significant impact on the outcomes, progress and effectiveness of the fighting or peacekeeping elements. This is particularly the case in urban areas where the non-combatant population is typically high. In addition the Rules of Engagement (ROE) change in urban environments or where there is a risk to the population and this can be exploited by threat forces to achieve a given end state or by elements in the population for their own cause. Also the civilian population can be at risk from opposition forces who either operate under different ROE to friendly forces or exploit the ROE used by the other side. Although understanding the culture(s) of an urban population can significantly aid in communication and winning the "hearts and minds" of the population [1-5], understanding the **stimuli** as **triggers** and **causes** which have in the past caused (and hence might cause) the population to revolt or act in a particular way can give insights into how they might react in the future, providing there are sufficient historical trends. These acts we will call **events**. They may range from insurgences¹ through assisting or supporting one side or another in fighting to mass popular support of a political party or regime. The aim of this report is to undertake an historical analysis of **stimuli** (as **cause** and **trigger**) and effect (as **events**) trends between **triggers**, **causes** and **events** in the population of East Timor over the last 400 years.

The methods used are relatively simple techniques from qualitative historical data analysis, soft operations analysis techniques including trends mapping methods such as influence diagrams, and various other methods for analysing and identifying trends in qualitative as well as quantitative data [6-14]. Due to the qualitative nature of the type of historical data in this study it is not what would be considered "statistically valid" where the same **event** or sample is measured many times. Historical events occur only once and hence we cannot perform statistics on the data to achieve an average result. In order to obtain an "expected" value in this type of study we can only compare "similar" **events** and note trends in **causes** and **triggers** for **events**. However, as we are utilising real data points the results are defensible as the **events** have actually occurred in the past in association with the given **stimuli** as **causes** and **triggers**. While any anticipated reactions cannot be validated by this study, it provides a solid basis or foundation for the arguments presented and for any future trends analysis on the problem space. For simulation, wargame or training support this historical data can ground the simulation or support by fixing one or more real data points in space.

This report provides a baseline study of the reaction of populations to imposed **stimuli** in a regional urban environment which is likely to be encountered by Australian Military forces, from a fact-based perspective with no attempt to understand the cultural or sociological behaviours. The intent is to attempt to identify probable "generic" **causes** of the population reactions over a large time period and determine if there are links or trends in these **causes** over the time period. This may provide valuable insights to the reaction of this population and provides a basic dataset for input to training and wargaming as well as any future trend impact analysis. Additionally we will determine the utility of this form of analysis for providing qualitative data on urban populations.

¹Insurgences are defined as acts of insurrection, revolt or rebellion by the Macquarie Dictionary, Third Ed.

East Timor was selected for this baseline study for a range of reasons. It is a good example of a South East Asian neighbour to Australia in terms of the type of population and their location and is within the area of interest identified by the government White Paper on Defence in 2000 [15] and the National Security update in 2003 [16]. In addition it consists of several cultural types and beliefs as a result of its history. Finally, it has a long documented history of population insurgences and military actions and it has a recent history of military activity. Also, the scope of the problem is commensurate with the capabilities of the ADF; indeed the ADF has recently been involved in the area and is still conducting operations there today as part of the UNMISSET operations. Importantly, the **events** of interest are well documented and easily accessible back to the early 1700s. Prior to this date the details are not as well known but the behaviour and "cultural" profile of the population is well developed [13, 17-20] and has allowed an understanding of the evolution of the **causes** of the **events** of interest to be developed and analysed. Trend Impact Analysis may allow future actions/reactions of the population to be assessed based on these historical trends. This study also provides qualitative data which could be used in war games or training exercises where the input of the reaction of an urban population is from a real environment.

2. Methodology

This analysis was undertaken using a variety of "soft" Operations Research (OR) approaches as well as techniques from qualitative historical analysis and the political and anthropological sciences [5-8, 10, 14, 20-22]. These methods allow the qualitative data to be analysed and trends to be identified for the **triggers**, **causes** and **events**. The data was obtained from a wide variety of sources including an extensive literature survey on East Timorese history [2, 13, 17-65]. An attempt was made to include all sources which detailed the environment of the population (politically, socially, culturally etc) as well as the **events** themselves in detail, and any other relevant material which completed the picture.

The process involved an analysis of determining the historical **events** of interest, elucidating the underlying **causes** and **triggers** and initially mapping and linking them together graphically. In addition to linking the **causes** and **triggers** to **events**, the links between **causes** and **triggers** themselves over time were also investigated visually. This graphical process allowed trends to be identified and investigated in further detail. The graphical process also allowed low level quantification to be made with relation to analysis of frequency of **events** and **causes** and hence enabled further trend identification. Other information investigated at a quantitative level included population statistics of religion and ethnicity, where it was available. Although an item of interest was time between **causes**, **triggers** and **events**, this was not conducted, as there was not sufficient detail available for all events to conduct this analysis for East Timor.

The process of trend analysis initially involved data sourcing and collation and the generation of a narrative, which described the environment (political, social, economic, cultural etc.). From this, **events** of interest were identified, as were the underlying **causes** and **triggers**. Due to the "detailed" nature of the information in narrative form it is not possible to identify many of the trends in the **stimuli** as a result of the complexity

of historical linkages. As a result, once the **events** and **stimuli** were identified in detail and historical accuracy was ensured, this information was then laid out in a graphical form. This simplified the presentation of the information and allowed any correlations to be made graphically. From this graphical representation some basic quantitative data (such as **event** and **stimulus** frequency) was extracted and analysed.

The primary graphical representations used were **Stimuli/Event** relationship maps (relationships between **stimuli** (as **causes** and **triggers**) and **events**). These diagrams list the **events** as central features and place around them the **stimuli** that are linked to the relevant **events** by an arrow. Two levels of this map were generated. The first was a "detailed" version, which listed "detailed" **stimuli** around the **events** and showed relationships between the **stimuli** where they played a "significant" role. The second level was a "distilled" version, which placed the "detailed" **stimuli** into generic categories, which simplified the analysis of the information. The second representation used linked the **stimuli** alone over the two time periods the study was divided into, in order to show new or continuing **stimuli** and their evolution over time. In addition this became a powerful way of showing graphically the Timorese "memory" discussed later. Timelines were also used to visually inspect **event** proximity and to correlate demographic data.

Location analysis was also undertaken for the colonial period from 1769 to 1913. This was to determine any correlations between location, education and other geographic factors (such as rebellion spread geographically – or time based) during this period where insurgences/reactions occurred within kingdoms. This technique could not be applied to the later stages, as there is limited relationship between location and **events** analysed, as they are largely decentralised.

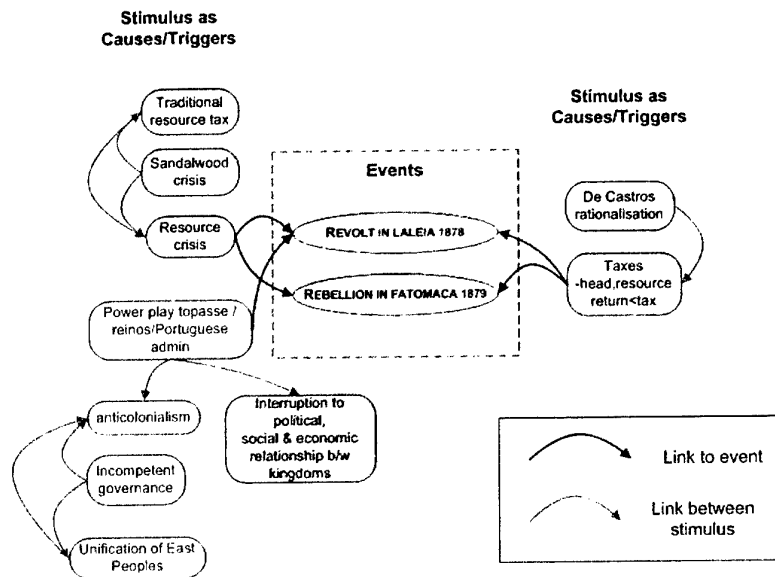
Figure 1 shows an example of the generation of a **Stimuli/Event** Map in both "detailed" and "distilled" form and a **Stimuli** relationship map. The two **events** of the Revolt in Laleia in 1878 and the Rebellion in Fatomaca in 1879 were chosen to illustrate the process due to their relative simplicity. The inequality **cause** was used to show **stimulus** relationships, as it was also relatively simple. The "detailed" section of Figure 1 shows the two **events** identified from the narrative (which are in yellow and are highlighted by the box). Surrounding these **events** are the "detailed" **causes** and **triggers** associated with these **events**, which are then linked to the **events** by the black arrows. Additionally the blue arrows link the "detailed" **causes** and **triggers**, indicating those additional relationships. The **causes** and **triggers** are colour-coded according to generic areas of interest based on historical data. These are elaborated in the Appendices. Even with this simple subset the complexity of the "detailed" information becomes apparent. Below this "detailed" example is the "distilled" representation, where the "detailed" **causes** and **triggers** are then reduced into generic categories, which simplify the data without losing the integrity of the relationships and allow analysis to be conducted much more readily. These generic categories were also determined based on historical data. This allows the extraction and identification of trends which can then be assessed in more detail where needed.

Finally the third area of Figure 1 shows an example of the relationships between the **causes** and **triggers** as **stimuli** themselves. This was undertaken by placing the "detailed" pre date **stimuli** on the far left hand side linking to the "distilled" **stimuli** for the same period next on the right, which then links to the "distilled" **stimuli** from the post date period which in turn link to the "detailed" **stimuli** for that period. This

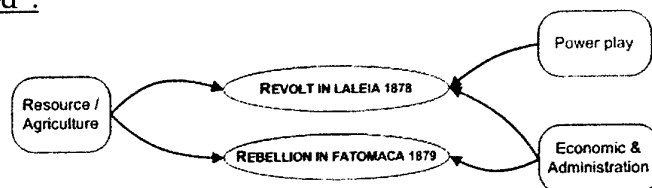
enabled the complexity in the **stimuli** relationships to be shown (most are not independent), showed their evolution over time and finally represented the Timorese “memory” of **causes** and **triggers**.

Relationships between Stimuli (as Cause/Trigger) and Events

“detailed”:



“distilled”:



Relationships between Stimuli (as Causes/Triggers) – used to show the “memory” of Timorese Society

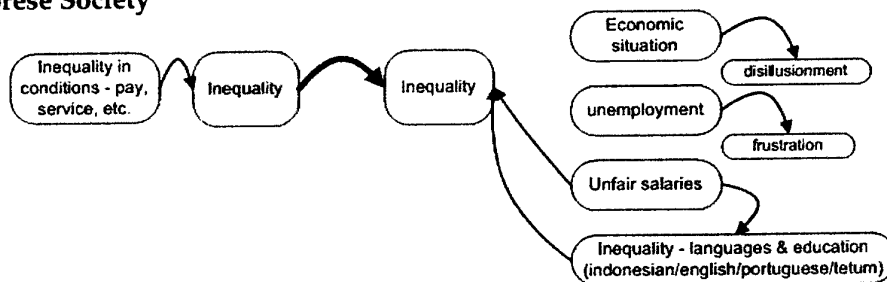


Figure 1 Example of visual methods used to represent **Stimuli (as Cause/Trigger)** and **Event** relationships and **Relationship between Stimuli** (examples from Appendices B.1, B.2 & B5)

3. Brief History of East Timor

The Island of Timor is divided into two regions: East Timor (Democratic Republic of Timor-Leste (East Timor)) and West Timor (Indonesian Province of Nusa Tenggara Timur), and has had a very turbulent history over the last 500 years. Prior to the beginning of Portuguese colonisation in the early 1500s there were already distinct differences and traditional rivalries between those Timorese who lived in the west of the island and those who lived in the east [13, 19, 20, 59, 60]. The island was based on kingdoms (*reinos*) each of which was headed by a “king” (*liurai*) and there were literally hundreds of these on the island. Between the kingdoms there were many alliances, rivalries and wars and the Timorese people were described as a warlike tribal race with a “strong fighting spirit”[20]. Often the colonial and later history of East Timor is referred to by the Timorese word for war - *funu* [20, 61, 62].

Appendix A shows a timeline of **events** of interest and relevance to this study as they relate to each other. Certainly modern times have provided many incidences for investigation – however the importance of the rebellions occurring from 1719 to 1911 provide an excellent opportunity to investigate correlations – if any exist - between modern and early **causes** and provide insights to the “behaviour” of the Timorese under stressful conditions. The history of the island is quite intricate and “detailed” and a brief description is given here which leaves many details out – such as political intrigues and other developments, which were not considered, or not considered to be relevant to this analysis. This history represents themes related solely to the analysis and should not be taken as a standalone account of Timorese history. The historical omissions have been incorporated into the analysis in order to determine the primary **events** and **causes** of interest. The sources used [13, 17-23, 27, 30, 32, 39, 44-46, 49, 50, 52, 60-62] , describe the entire history in much more detail.

The first documented reports of Timor date back to 1436 from Ming Dynasty China where Timor and its importance in the region for sandalwood trade are highlighted [20]. It is interesting to note that at this time there was little cultural interaction with no notable mixing of culture or beliefs between the Timorese, the Chinese, or Arab traders located on the island [13, 19, 20, 22]. Following this period of trade, the arrival of the Portuguese (and associated Catholic missionaries) in 1514 and the Protestant Dutch in 1595 [36] saw the beginning of colonialism on the island. Over the next hundred years both the Portuguese and Dutch attempted to convert (in competition with each other) the animist² Timorese to either Catholicism or Protestantism respectively. However this was quite unsuccessful ; both sides made very slow progress and little is documented as a result. Indeed there are no major documented accounts of population reactions of note in this period. In addition the Portuguese style as a colonial ruler (from these early days) was very “informal” with the European administrative processes overlaid on the traditional *liurai/reino* structure where the *liurai* still ruled their “subjects”[54].

The first well documented **event** (rebellion by the population) occurred in 1719 in the *reino* of Cailaco near the centre of the island and continued until 1769. This year was significant in the history of the island as the Dutch took the opportunity to take “colonial” ground from the Portuguese by supporting the *topasse* (catholicised mixed

² The Macquarie dictionary defines animism as the attribution of a soul to animals, plants, inanimate objects or natural phenomena.

race descendants of the original Portuguese settlers and native Timorese [20]) at the Siege of Lifau (near Oecusse in the Ambeno enclave on the modern map), which was the seat of Portuguese power on the island. As a result of this **event**, the Portuguese fled to Dili (the site of the present capital of East Timor), and the island was split between the Portuguese and Dutch colonial powers (along lines similar to the current borders), with the Ambeno province remaining Portuguese.

With the advent of the Portuguese taking formal colonial power, there were major changes in the formal administrative structure in the east of the island. The Portuguese structures were initially overlaid on the traditional *liurai* ruling structures with the Colonial administrators dealing with the traditional leaders [54]. During this early colonial period, after the Siege at Lifau, the population was relatively quiet for a period of time while the colonial Portuguese utilised the vast sources of sandalwood for trade, and, as those stocks were depleted, introduced new agricultural resources for production and export. As the traditional resources were depleted and new ones introduced, many economic crises developed for the Portuguese rulers. Over the next 150 years the many Portuguese administrators introduced changes to the taxation, administration, resources, agricultural and environmental states, processes and procedures. On top of this there were developments in political manoeuvrings for power between traditional Timorese *liurai*, Portuguese administrators and the *topasse*.

Interestingly, the colonial period from 1848 through to 1913 saw no less than 39 significant **events** where the population reacted to some **stimuli**, which are sufficiently well documented for analysis. It appears that this significant increase in activity is a culmination of the previous colonial developments and associated problems, with the Timorese people (from *liurai* down to their lowliest subjects) eventually deciding, "enough is enough". Figure 2 shows the proximity of **events** over this period. The end of this active colonial period of **events** includes the fall of the Portuguese Crown as a Constitutional Monarchy in 1910 (Portugal), which then pre-empted the last great colonial rebellion of Dom Boaventura in 1911-1913.

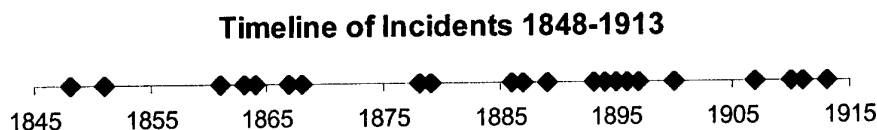


Figure 2 Proximity of incidents 1848-1913

The period between the revolt of Dom Boaventura and World War II was again relatively quiet in terms of **events**. However in 1942 (during World War II) this ended, when some Timorese (primarily those in the East) supported the allied troops whereas others (primarily those in the West) supported the Japanese (although there were some in the East who supported the Japanese) and there were riots amongst the population – some directed at the Japanese, some at the Portuguese. The differing reasons behind the rebellions and support are discussed in further detail later in this report. During this period many of the allied supporters died or placed their lives at grave risk for people they had not had dealings with in the past. In the years immediately following World War II, Dutch West Timor became part of the new Federal Republic of Indonesia (created in 1945 to 1949) when the United Nations brokered a round table agreement for the Dutch East Indies to cease to exist [34]. Following World War II there was a more

“modern” turn of events with a political rebellion in 1959, which was the last prior to the Portuguese Revolution (fall of the Portuguese Government in Portugal) in 1974. This saw the creation of the first Timorese political parties and the offer of independence to East Timor by the new Portuguese Government.

The final period was a very turbulent one for East Timor with its invasion and annexation by Indonesia in 1975. The following 25 years are extremely well documented and saw the end of the Indonesian occupation with the United Nations referendum on independence voting in favour of a Democratic Independent Republic of East Timor. This was followed by the establishment of INTERFET in 1999, and UNTAET in 2000, to initially secure the country as violence from militia groups crossing the border from West Timor spread. This stabilisation and support operation led by the ADF under the UN allowed the vote for the new independent government of the Democratic Republic of East Timor to be undertaken (officially known as the Democratic Republic of Timor-Leste and in this report known as just East Timor). This new government took effect in May 2002 and was supported by UNMISET in order to assist in stabilisation.

In order to make the large amount of historical data manageable it has been broken down into two periods: the Colonial Period from the first major Rebellion in 1719 to the last major colonial rebellion ending in 1913 and then post 1913 through WWII until 2002 when the last reported major event occurred. This covers the most important periods in the history of the island and its population. The first period is that of Portuguese Colonialism in the 1700s and 1800s during which the bulk of the population was not well educated (prior to the arrival of the Portuguese there was no formal ‘western’ education on the island) and education was through traditional means and methods. After the arrival of the Portuguese the missionaries set up the first schools in Lifau which serviced only a few Timorese of a particular status in a select area. This was followed by the establishment of more missionary schools in the 1700s and 1800s which still educated only a small minority [17, 20]. The second period is the “modern” period and includes the end of Portuguese colonialism, the Indonesian invasion and annexation of Portuguese Timor and the transition to independence. This period is characterised by a more educated population, through formal schools for all Timorese being set up by the Portuguese from the early to mid 1900s and then further extended by the Indonesians [52, 61, 62]. Appendix B shows the relationships between events and causes with B.1 and B.2 up to 1913 and B.3 and B.4 showing the same links for post-1913.

4. Historical Population Demographics in East Timor

The population in East Timor has changed somewhat over the last 400 years in terms of both the geographic locations and demographics (Appendix C). It has continued to be however, a mainly subsistence economy throughout the period under investigation for the majority of the population [19-21, 25, 27, 37, 39]. In the pre-colonial and colonial periods the population was distributed amongst kingdoms of various sizes and importance and this tended to be the focus and “life” of the majority of the population. Post World War II this structure was altered and the population was displaced from their former geographic locations, particularly following the Indonesian invasion and annexation in 1975 [20, 44-46, 50, 61, 62].

Over the last 400 years there have been some ethnicity and religion demographic changes to the population in East Timor. From 1975 to 1999 there were many Indonesian Muslims (and Christians) introduced to the island under the transmigration policy of the Suharto Regime. All Timorese were required to register under one of five recognised religions – Islam, Catholicism, Protestantism, Hinduism or Buddhism. At this point it is interesting to note that the Timorese had already resisted conversion to Islam for hundreds of years prior to Portuguese arrival [13, 17, 19, 20]. When forced to register under a faith, the majority of the Timorese who had not adopted Catholicism from animism at this point chose Catholicism rather than converting to Islam. It is believed that this is primarily due to some synergies between the principles of animism and Catholicism where the worship of the dead and worship of icons are key threads [19, 20, 30]. As an aside it is interesting to note from Appendix C that even when 20% of the population was Indonesian, the Muslim population was still only 4% indicating that many of the transmigrants also chose to register as or already were Catholic.

Many of the ethnicity changes result from the history and mixing with other cultures. The ethnicity is seen to change significantly from 1975 to 1999 during the Indonesian occupation – prior to altering once again. The traditional tribal behaviours and hence that of the populations have also altered due to the forced relocations and transmigrations which also further affected the ethnicity demographics as seen in Appendix C [20, 21, 25, 27, 29, 36, 37, 39, 52]. In addition there was a large geographical displacement of Timorese as a result of the transmigration policies of the Suharto Regime. These transmigration policies resulted in traditionally owned Timorese agricultural land being given to the transmigrants during the occupation. Subsequently there was little left for the Timorese in these areas and they were then forced into resettlement camps away from their traditional locations and occupations. During this period then, there was the potential for increased **event** activity against the Indonesians in the urbanised areas as that was where the displaced Timorese were forced to go to for work and the general locations of the controlled resettlement camps [20, 50, 62].

Appendix C compares the ethnicity and religion changes in East Timor over time, and it is interesting to note that when overlaid with major points in the islands history, there is strong correlation, with “colonialism”, religion and ethnicity changes. In fact, some of the **causes** discussed in Section 5 are related to population changes. There were some difficulties in obtaining this data, particularly religious and ethnicity demographic data collected in the 2002 census due to the relatively new operations of the new East Timorese government. It is anticipated that this information will be readily available in the forthcoming years as the census bureau becomes established [26, 38].

5. Trends Analysis

This trends analysis was generated using the methodology described in detail in Section 2, and the results and some further descriptions are presented here.

The **causes** of the **events** which are identified in this trends analysis are discussed in the following sections and are marked in the diagrams in Appendix B. In the appendix are “detailed” **stimulus/event** diagrams and “distilled” **stimulus/event** diagrams. The “distilled” views of the diagrams have been used to minimise the numbers of links in

the map and to allow **causes** of a generally similar nature or classification to be condensed. In each diagram the **causes** are classified by their colour and these classifications are listed in the Appendices. It is often difficult to distinguish one category from another due to the interdependence, which is highlighted in Appendix B.5. For example, in the pre 1913 analysis, powerplay, anticolonialism, and traditional rivalries have elements which are the same for certain **events**. The terms used were a "basis set" selected to cover the items of interest. Table 1 describes the general terms used to describe a **cause** in more detail.

Table 1 Definitions of Cause/Trigger terms used (terms with similar definitions are grouped together)

Terms Used	Description
Powerplay	Elements such as <i>liurai</i> , <i>topasse</i> and Portuguese Administrators vying for power. After WWII included Timorese and others using the political parties, and external influences on these parties, and minority groups all attempting to gain greater power/influence.
Anticolonialism Independence Incompetent Governance	Refers to the Timorese anti-colonial sentiments and desire to rule themselves. Post 1974 the movement became strongly pro-independence, which grew out of the original anticolonialism. Much of this stemmed from a perceived inability of the Portuguese Governors to rule properly.
Resource (incl. Sandalwood Crisis) Agriculture Economic Administration Unemployment (Taxes/resource taxes) De Castro's Rationalisation Forced Labour	Refers to depletion of and changes to natural and traditional agriculture and trade resources and products. Sandalwood in particular was stripped by the early colonialists. Then taxes were imposed on its use and new products introduced with new quotas for production including forced labour to meet these quotas. Economics and administration covers all aspects of the running of the colony/province/nation. It incorporates taxes, unemployment, trade, infrastructure and continual changes from the traditional methods, and poor decisions made in these areas. De Castro's rationalisation is an early aspect of economics and administration as the Governor attempted to force a rationalisation of the economy to boost the colony's production.
External Influence/ Incitement	Outside forces manipulating a situation or group's motives to provide a <i>stimulus</i> to force some <i>event</i> to occur. (These outside forces include the Dutch, colonial monarchists and pro-Indonesian militia)
Confusion	Lack of popular understanding of circumstances and facts relating to an <i>event</i> or too many competing interests for population to allow clear understanding. In the early 1900s this was fuelled by churches and schools being closed and Portuguese Crown Symbolism in the colony changed immediately under the new Portuguese Government.
Inequality	Inequalities in all areas of life in Timor eg language biases affecting employment opportunities and hence salaries and other conditions.
Traditional Rivalries & Relationships & Fighting Spirit	Existence of traditional rivalries between Timorese groups, which may have existed for hundreds of years. These relationships and rivalries are embedded in the Timorese "memory" and are called upon throughout Timorese history. The Timorese have historically had a strong fighting spirit promoted by these two factors.

Terms Used	Description
Transmigration Forced Religion Forced relocation Forced language Introduced Muslim Communities	The relocation of Indonesians from other regions of the archipelago to settle in Timor and undertake agriculture and business interests. Land and businesses belonging to Timorese are given to the transmigrants. During the 1975 – 1999 annexation of Timor, the Indonesian government through transmigration and its policies enforced the use of the Indonesian language for all administrative and schooling purposes; the relocation of Timorese to camps and urban areas for greater control and the requirement that all residents belong to one of 5 major religions.
Insult to culture, beliefs and people	The Timorese take their beliefs (even those adopted late in their history) very seriously. During the days of the young colony and the attempts to convert to Catholicism, some missionaries paid dearly for what were considered insults to the Timorese way of life and animist beliefs. In the time of the annexation the pro-Indonesian elements on the island used this as a way to “taunt” the local population.
Violent control and Human Rights Abuses	This refers to the now well documented use of force by the Indonesian Military to control the population and the many human rights abuses.
Recognition	Feeling by the population that the worldwide arena was not aware of their plight and their desire for external intervention.
Land Claims/Issues	In the colonial era this refers to changes in the use of traditional land for production and hence changes to various ways of life. In the 1974-1999 era this involves traditional Timorese land being forcibly taken from the owners and given to Indonesian transmigrants with no compensation.

5.1 Pre-1913

5.1.1 Historical Overview

Appendices B.1 and B.2 show two diagrams of **events** and the probable **causes** of those **events** for the colonial period pre-1913. These **causes** were determined by the historical analysis described in Section 2. The first (B.1) gives a “detailed” representation of the **causes** and their links to **events** and the second (B.2) gives a “distilled” view of the **causes** summed up as a more generic category in order to simplify the number of links in the diagram as described above. What is clearly noticeable in this early period is the complexity which exists in the causal relationships. There are few cases where there is only one distinct **cause** of an **event**, for example the revolt of the *moradores*³ in 1864. For this example there was a specific identified **cause** of inequality in pay, conditions and service for the native militia used by the Portuguese. This **event** resulted from underlying past resentment (including inequalities in pay and conditions over many years and having to fight fellow Timorese) followed by some new “**trigger**” which was better treatment and services for the other militia groups and a downgrading of the conditions for the *moradores*. Importantly, it is also clear that the traditional nature of the Timorese society plays a large role in the causal chain in that the Timorese “memory” is a part of the people and their society. For example, the Revolt of Dom Boaventura in 1911-13 was one of the most complex of the “colonial” period. Political intrigues and manoeuvring aside, it resulted from a complex mix of [13, 17-20, 22, 30, 62]

- power plays between *liurai* and *topasse* amongst others (which had been going on for a couple of hundred years);

³ *moradores* were native Timorese militia who belonged to *liurai* loyal to the Portuguese Governor/Crown. They were usually the troops used in quelling any insurgences in conjunction with Portuguese and other militia soldiers not native to the island.

- incitement from the Dutch, colonial monarchist supporters and anti colonialists;
- at least 300 years in administrative changes and taxation increases;
- traditional rivalries, blood pacts and past loyalties;
- resource issues from the last 300 years and
- some confusion amongst the participants and population as to what they were actually fighting for.

Of note is the appearance of issues (past **causes**), loyalties and pacts from hundreds of years ago (and staying in the Timorese “memory”) before again becoming **causes** at later dates.

5.1.2 Location Trends

Location analysis was undertaken for the colonial period from 1769 to 1913. The analysis involved determining correlations such as those between the location and time of **events**; the locations and the size of population and this relationship with time of **events** and other factors such as looking for geographic spread of **events** with time. This technique could not be applied to the later stages, as there is limited relationship between location and **events** analysed, as they are largely decentralised.

For each insurgent **event** on the island in this time period, the general date and locations were located on a map of the island from 1847-1913 [19] as shown in Figure 3. Of note is that during this period the insurgences were not restricted to one region of the colony, but stretched from the border to the far eastern end of the island. There are several noticeable trends resulting from this analysis. The **events** tended to occur along the entire northern coastal region, some of the southern coastal region and through the centre of the island as a block. This block through the centre of the island was through the most densely populated region (where there are closely colocated kingdoms) of the colony as identified in Figure 3, though many densely populated areas were still not affected.

There did not appear to be any clear and noticeable correlation between **events** and other factors such as the establishment of various noted educational establishments in either location or time. There is also no clear evidence of the spread of the rebellions in any direction over time. The reason for this is not clear and it is proposed here that some relevant factors could include:

- reduced communications between the population bases in the *reinos* due to distances and travel times and no need to leave the region;
- loyalties and relationships between different *liurai*, *topasse* and the Portuguese;
- Timorese memory of relationships and loyalties and previous **stimuli**;
- education level of the elite in the kingdom and those with ability to motivate their population; and
- general sentiment of the population resulting from local factors

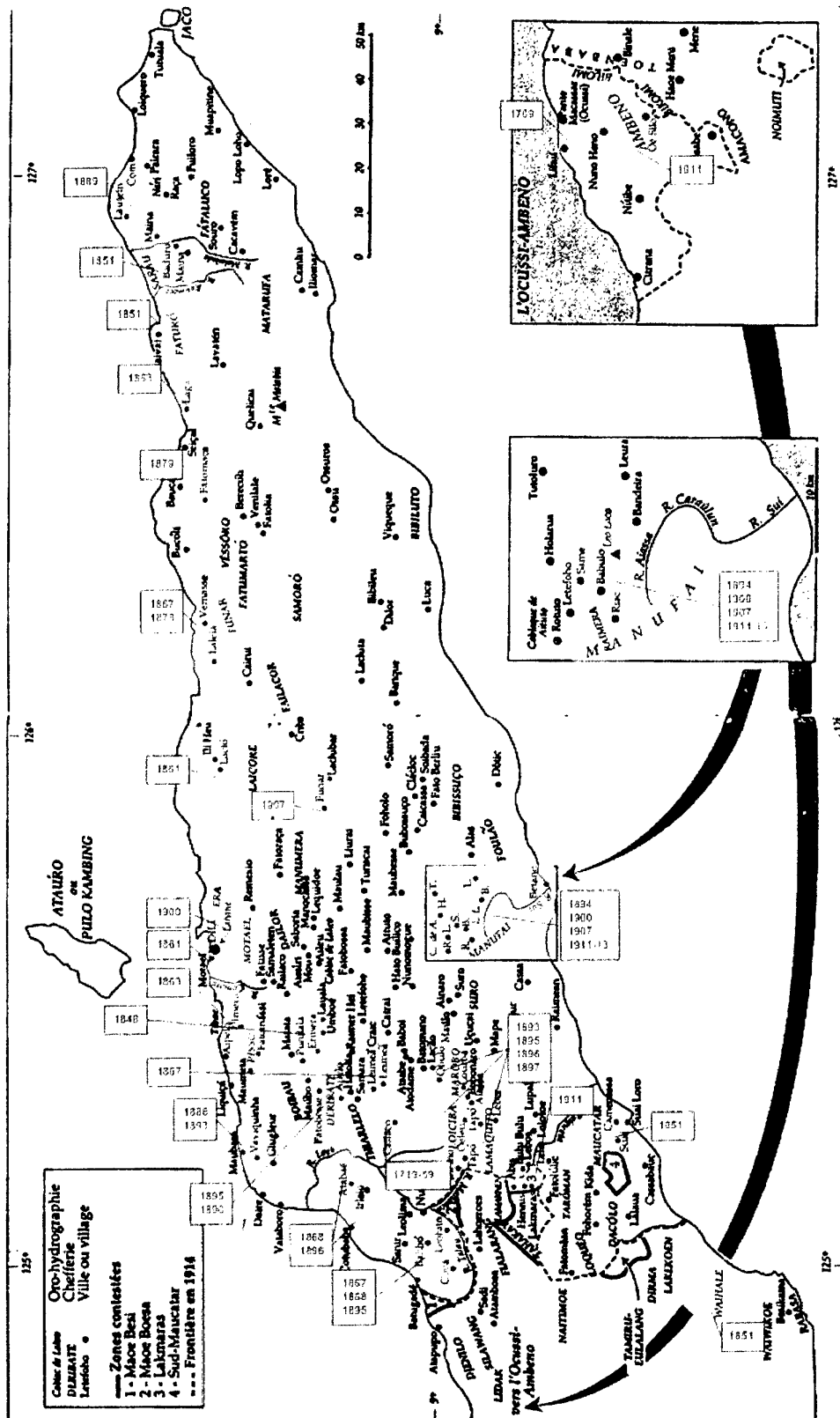
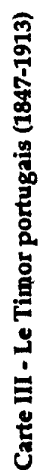


Figure 3 Map of East Timor 1847-1913 after [19] showing location of *events* in yellow and approximate dates in the corresponding red boxes.

That is, we can generalise to say that **events** occurred in locations with substantial populations and the effects were focussed in specific locations. In the later periods where the population is largely decentralised (i.e. move easily and freely about the island and are not focused to *reinos* ; are dispersed all over the island; have easy access to modern communications and are better educated), there are some areas where the native populations are concentrated in "relocation camps" [20, 52, 62] or in the Dili region and thus the **events** occurred either in these focussed areas or across the majority of the island. We can also say that as a result of this analysis it has been seen that if the population doesn't move, then neither does the **event**.

5.2 Post-913

Appendices B.3 and B.4 show two diagrams of **events** and the **causes** of those **events** for the period post-1913. The first (B.3) gives a "detailed" representation of the **causes** and their links to **events** and the second (B.4) gives a "distilled" view of the **causes** summed up as a more generic category in order to simplify the number of links in the diagram. What is clearly noticeable in this period is the continuation of the complexity from the pre-1913 period. It is notable that the number of **causes** in the "detailed" view is similar to that of the pre-1913 period but that there are more **causes** in the "distilled" formats as some new categories have been introduced such as violent control and human rights abuses as well as recognition (see Table 1). Importantly, it is still clear that the traditional nature of the Timorese society (including the "memory") plays a large role in the causal chain of **events** even in the modern era as shown by many of the **causes** from pre-1913 also appearing as **causes** for this period. For example, in a population riot in 1942 in World War II, the rioters were not in support of the Japanese (in fact many were supporting the allies), however they were "getting back" at the other *liurai* who had supported the Portuguese in the revolt of Dom Boaventura in 1911 [20, 21, 41, 52]. This **event** is discussed in detail later in the report. In the Timor Civil War in 1975, the traditional *liurai* rivalries and power plays were part of the **cause**, which were played upon by the Indonesian incitement as well as loyalties (such as those between *liurai*, *topasse* and those loyal to the Portuguese) from the colonial period[13, 20].

5.3 Relationships between Causes and the "Memory" of Timorese Society

Table 2 shows the basic "distilled" list of the **causes** of insurgences prior to 1913 and the corresponding list post-1913, while Appendix B.5 shows the correlation between pre- and post-1913 **causes**, which clearly shows the effect of the Timorese "memory", with **causes** continuing throughout the time period. It is interesting to note from this analysis that the majority of the **causes** are the same through the period investigated and that it is very simple to see the trends repeating themselves. Even though the **trigger** to the **event** may have changed over the years a new **trigger** results in similar Timorese reactions to **events**. The modern list has a couple of additional **causes**; to some extent these can be traced back to relationships with previous **causes** and past societal reactions by conducting further historical investigations into the **events** through the literature and by linking the **causes** and trends. These are shown in Table 2. Many of the **causes** (either recurring or with past relationships) can be classified as persistent **causes** as they appear throughout documented Timorese history and often the persistence results from the Timorese "memory". In other words, past **causes** have been identified as **stimuli** for later **events** through this "memory". Some examples include the traditional loyalties

and support bases of the *reinos*; perceived negative feelings towards current beliefs; and general anticolonial sentiments. It is difficult to distinguish between **causes**, as many are interrelated and have dependent elements, which can make it difficult to distinguish true **causes** – or identify major **causes** or **triggers**. This is illustrated by one example in Figure 4. Below some of these examples are discussed in further detail.

Table 2 Persistent Causal Trends across time

Common	Additional Post 1913
Confusion	Transmigration
Resource & Agriculture	Recognition
Economics & Administration	Violent Control and Human Rights Abuses
Inequality	Insult to culture adopted by the Timorese
Traditional Rivalries, relationships and fighting spirit	Forced religion, relocation and language assimilation
Power Play	
Anticolonialism / Independence	
External Influence/Incitement	

An example of societal **cause** evolution tied to Timorese memory is the similarity in the worship of dead spirits and icons, which allowed the Timorese to incorporate Catholicism into their traditional belief structures. The incorporation of Catholicism into the Timorese way of life was a slow gradual process, which occurred over 400 years. Many Timorese did not incorporate the new religion until they were compelled to under the regulations of the Indonesian occupation and even then it was adopted in conjunction with the traditional animist beliefs. This point of change is shown in Appendix C. The Catholic Church continually supported the Timorese of all denominations (particularly during the Indonesian occupation) and as a result many Catholic symbols became as important to the Timorese as the traditional animist ones. It can be seen here that over time the Timorese adopted Catholicism which they had been resisting from 100-400 years ago, and that the reactions seen in that period by the population against Catholicism were now being applied against another religion (Islam), which they did not believe in (as it was quite dissimilar to animism) and had been resisting longer than Catholicism. At this point, Catholicism was now given a similar status as animism had in the past.

In the second example, the issue of anti colonialism was fuelled in the early days by what was perceived by the Timorese to be the incompetence and mismanagement of the island and its administration under Portuguese colonial rule. In more modern times this feeling evolved into an independence movement. After the Timorese were granted a move to independence by the new Portuguese Government in 1974, Indonesia invaded and subsequently instituted violent measures for population control as the population and new political movements resented this annexation. These factors combined to form a new set of issues, which further fuelled the original desire for Timorese control of the island after years of poor administration by others. Additionally, the Indonesian Government, by placing greater controls on the inhabitants of the island than they were used to under the Portuguese administration, compelled the Timorese to fight even harder for independence than they had done in the past.

An example of how one complex causal link (evolution) was developed is shown in Figure 4. This illustrates how the complexity of the problem can develop very quickly. This relates to Appendix B by showing a greater level of detail of the relationships

between **causes** at the specific detail level and the appendices showing **stimulus/event** relationships and relationships between **stimuli** are derived from this level of detail.

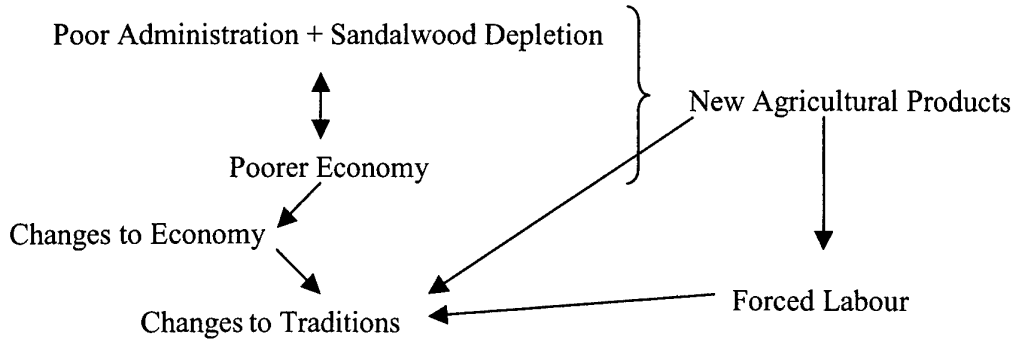


Figure 4 Colonial example of a causal chain of events

An interesting outcome of this analysis has been the identification of the motivation or impetus for change in the population. It appears that over the history of the island, if there was no **stimulus** to the population there was no change in the status quo. A good example is the disinterest in the adoption of Catholicism by the majority of the population for 400 years until there was some motivation or impetus requiring the population to convert (Indonesian Policies). This impetus/motivation was the Indonesian Annexation and requirement for a registered religion. The animist Timorese then adopted Catholicism as of the greatest benefit to them, as described in Section 4. This can also be seen in the very early days of the 1600s when there was relatively little **stimulus** from the Portuguese and Dutch and thus the population remained relatively quiet. Similarly, this is seen from the period from 1920 to 1940 where once again the status quo remains, as there is no **stimulus** applied.

An important outcome of this analysis is the identification that different “populations” (in terms of ethnicity, religion and education demographics) in East Timor over the last 400 years have had similar reactions to applied **stimulus**. That is, for a similar or related set of **causes**, the different populations have reacted in a similar way. This might indicate that any future **stimulus** which is similar to those seen in the past, may result in an insurgency by the population. It might also indicate that any future **triggers** might also cause a population insurgency if the societal “memory” and underlying past **causes** are not understood and allowed for.

As an aside, it is interesting to note that throughout the history of East Timor, most insurgencies were put down and not actually “resolved”. In some cases amendments were made such as those to taxation laws after the revolt of Dom Boaventura or the increase in standards for the *moradores* after their second revolt in 1887. However, in the main the underlying **causes** were not addressed as part of the resolution. This may be a factor which has allowed the Timorese “memory” to become such an important factor of their society and why the **stimuli** are so complex.

5.4 Frequency Analysis of Causes and Events

Utilising the diagrams showing the relationships between **events** and **causes** (Appendix B) it was possible to extract some limited (and subjective) quantitative data allowing a frequency analysis comparing **events** to **causes** and vice versa. Figure 5 shows the frequency of **causes** attributed to each **event** and in effect gives an indication of the complexity of the relationships. Figure 6 shows the frequency of **events** attributed to each **cause** and highlights changes in the **causes of events** over time.

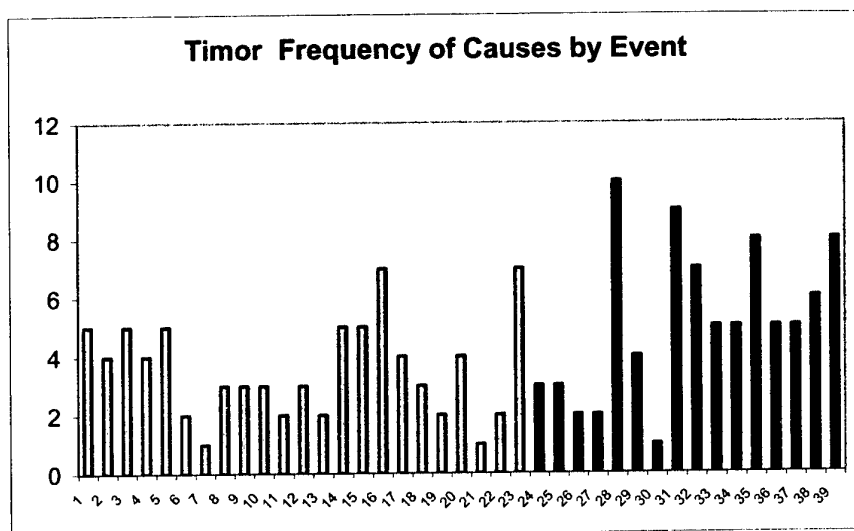


Figure 5 Histogram showing Frequency of **Causes** by **Event** (the x axis numerical scale corresponds to all the **events** listed in the diagrams B.2 and B.4 in chronological order & the blue corresponds to pre-1913 and the purple post 1913)

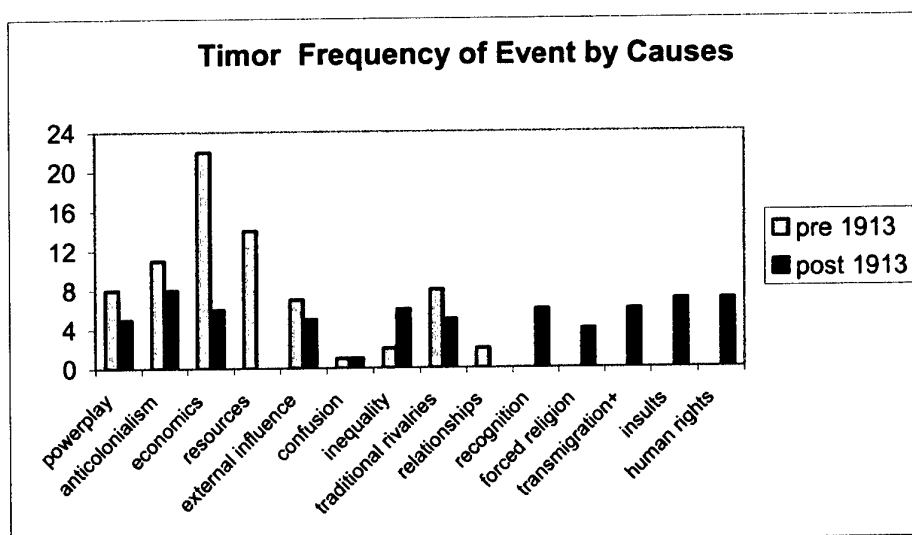


Figure 6 Histogram showing frequency of **Event** by **Causes**

Of note from these two figures is the cyclical nature of the **cause** complexity over time. In particular Figure 5 indicates that the number of **causes** contributing to an **event** cycles from relatively low to a maximum and down again over a period of time. This might imply that over time there is a “memory” or buildup of **causes** that contribute to some “boilover” **event**, which then results in a lower number of **causes** again. There are few examples where concessions were made to relieve the buildup anger of the population at the end of these cyclical periods, which may be a factor in the repetition of the effects.

Figure 6 shows very clearly that in the pre-1913 period economics (followed by resources) is a dominating **cause** of the **events**. However in the post 1913 period there is no clear feature (indeed the economics **cause** is on a par with most of the other **causes**) and the most notable trend is the large number of **causes** with a similar frequency level of **events** all contributing. This might indicate two things; the first is that as this data is taken from what could be considered “modern” times that the overall greater complexity of a “modern” society is fuelling the increased distribution of **causes**. The second is that the greater “morality” of the modern era raises issues such as “human rights” that in earlier times would not have featured so strongly. Another reason for the pre-1913 **causes** being less complex may be the result of the greater time span and the nature of the Portuguese colonialism and rule being much more informal where the Timorese *liurai* governed their own people under the auspices of the Portuguese administration. This is very different to the Indonesian occupation where the administration was a dramatic change to all current processes and all Timorese had to conform to the new policies.

5.5 Positive and Negative Influences over time

As a part of this analysis it was possible to undertake a very simplistic look at the apparent positive and negative influences on the population over the time period investigated. Table 3 shows a list of these influences. For simplicity they have been kept as generic as possible. Both long and short term influence considerations are incorporated into this analysis. They have been subsumed into this general table as part of the analysis and are not marked – however this could be achieved in a more detailed analysis. The definition and analysis of positive and negative influences is extremely subjective in this study. The definitions used are:

- Negative Influence: population reaction to **stimuli** where violence between population or to others occurs (eg population attacks a part of a town).
- Positive Influence: population reaction to **stimuli** where no violence occurs or peaceful mass support or assimilation occurs (eg new religion is accepted and adopted by the population and there is no violent reaction or changes to everyday life). Could be considered a non-negative influence.

The positive and negative influences are different from the **causes** in that they are more specific influences on the society, which in some cases do correspond to **causes** and in some cases are **triggers**. They are merely a comparative list of items which caused either positive or negative reactions from the population and can be correlated with the **stimuli** discussed elsewhere in the report.

Table 3 Generic positive and negative Influences over time for East Timor

Positive Influence	Negative Influence
Chinese and Arab trade	Missionary conversions
Working within traditional social and political systems by external governing bodies	Perceived incompetence in administrators & bishops
Equality in pay, conditions, taxes, infrastructure etc. between Timorese performing similar functions	Rise in <i>Topasse</i> power
Education of the population	Portuguese/Dutch rivalries
<i>Topasse</i> integration into the greater Timorese society and support of native Timorese causes	Taxes
Acceptance of support by external bodies	Changes to traditional procedures
Creation of political parties towards independence	Resource Issues
Catholic church support of Timorese welfare and struggles	Fall of Portuguese Crown
Independent government and state of East Timor	Fear of Control
	Manipulation
	Controlled government and state
	Annexation and Invasion
	Forced relocation/language/religion changes
	Human rights abuses
	Violent control
	Inequality
	Disillusionment

6. Events of Interest

In this section we describe in further detail some of the **events**, which were used to derive the causal trends. They were used to show the potential escalation of situations and further illustrate the complexity involved. There are eight **events** of interest described here in more detail. Each was chosen for its ability to highlight the nature of the reactions of the population to the **stimuli**. They also highlight, in many cases, the causal chain and Timorese “memory”. Some also highlight aspects of crowd psychology [66].

6.1 Cailaco Rebellion 1719-1769

The Cailaco Rebellion is one of the most well documented colonial revolts of the 18th Century [13, 17-20]. It is also significant in the history of the island as it involves 50 years of revolt (the first major revolt on the island) and a push to oust Catholicism and the Portuguese, and ends with the island split between the Portuguese and Dutch colonial powers. This rebellion began following several small revolts, which included the slaying of Catholic missionaries and the desecration of churches by both native Timorese and *topasse*. In 1719 a dozen chiefs from neighbouring *reinos* met to celebrate a “blood pact” (swearing of loyalty among the participants) according to local rites in order to revolt

against the Portuguese and their Catholic missionaries. Three years later another *reino* launched a “war” upon the Portuguese by attacking a troop of *moradores* sent to collect *fintas*⁴ (loyalty taxes). These *fintas* were determined arbitrarily and they often exceeded the return. It is not clear that the taxes alone caused the rebellion, but it is said that the “violence with which they were collected favoured rebellion” [19, 20]. It is stated that the Portuguese strategy of “breaking the independence of kingdoms by intervening in existing political, social and economic relationships sowed the seeds for many later colonial revolts” [19, 20] and that these have even been seen in later modern revolts. For example, some **causes** of the revolt of Dom Boaventura can be traced back to sentiments originating from Cailaco.

The year 1725 saw the major act of rebellion over the 50-year period which was **triggered** by a *liurai* refusing to pay the *fintas*. The officer and his militia sent to collect the taxes had to retreat and then many other *liurai* (including those from the earlier blood pact as well as various other *liurai* with nearby *reinos*) joined in and according to colonial lore: “went on a rampage destroying religious images, churches, slaying two missionaries and some Christian converts” [19, 20]. Although a new governor tried to quell the situation, the chiefs of Cailaco persisted for two reasons. One was the certainty that all neighbouring *reinos* would provide support and the second was their absolute belief in the myth of the “impregnable” natural rock fortification of the city of Cailaco.

This rebellious stand against the *fintas* and other **causes** was continued until the seat of Portuguese power was forced to move from Lifau to Dili in 1769. This siege of Lifau in 1769 was incited by the Dutch and conducted by the *topasse* and local *liurai*. The **triggers** for both the start of the overall rebellion and the major act in 1725 was refusal to pay the *fintas*. The primary **causes** of this rebellion are:

- strong anticolonial feelings
- beginnings of the sandalwood crisis⁵ and use of traditional land resources by the Portuguese (resulting in less traditional use by Timorese)
- interruptions to traditional, political, social and economic relationships between the *reinos* (and manipulation of the traditional rivalries by the Portuguese to advantage)
- introduction of the *fintas* tax system in 1710-1714
- power play between native *liurai*, *topasse* and the Portuguese administrators

6.2 Rebellion in Cova, Cotubaba and Batugade 1868

The rebellion in the *reino* of Cova (spreading to Cotubaba and Batugade) simmered for many years prior to 1868 and was felt to be a threat to the colony by the governor, as parts of the *reino* stretched into Dutch Timor. West Timorese who had otherwise sworn loyalty to Holland joined the rebellion in the Portuguese colony. The governor declared

⁴ *fintas* were a new loyalty tax system introduced by the Portuguese Governor prior to the Cailaco rebellion. The amount of *fintas* was determined arbitrarily and the return gained by the *liurai* for the payment of *fintas* was normally less than they were contributing. This included grains for agriculture and profits from exports of the produce from their lands and workers.

⁵ The sandalwood crisis resulted from a hundred years of colonial “stripping” of Timorese sandalwood supplies for export. The colonial exporters realised quite late that the supply was not sustainable and other export commodities were then required. In addition, sandalwood is used by the Timorese for many traditional practices and they were now to be taxed for its use while the Colonial Government also taxed what sandalwood was still being exported.

martial law in Dili and organised a force of regular Portuguese troops and *moradores* to storm two seats of the rebellion. This rebellion continued for a month before it was brought “under control” and the completion of the defeat of the rebellion was to be demonstrated both ceremonially and symbolically by the Portuguese for the population to see and understand. The governor was to receive submission and loyalty to the Portuguese crown from both the *liurai* of Cova and Batugade with customary and traditional formalities carried out. Unfortunately the Queen of Cova refused to attend and it was not until 1881 that the governor could inform his superiors of Cova’s submission to Portuguese authority [19, 20]. It is unknown what the **triggers** to this rebellion were. The primary **causes** of the rebellion were:

- general anti-colonial sentiment – governor and bishop were considered incompetent by *liurai* and hence by the general population
- tax system changes and changes to resource taxes introduced by the new Governors and rationalisation of administration in order to make more money from the colony
- loyalist and dissident relationships (*liurai/liurai* and *liurai/Portuguese*) and rivalries versus traditional agreements between these parties

6.3 Revolt of Dom Boaventura 1911-1913

Political intrigues and manoeuvring aside, it resulted from a complex mix of [13, 17-20, 22, 30, 62]

- power plays between *liurai* and *topasse* amongst others (which had been going on for a couple of hundred years);
- incitement from the Dutch, colonial monarchist supporters and anti-colonialists;
- at least 300 years of administrative changes and taxation increases;
- traditional rivalries, blood pacts and past loyalties;
- resource issues from the last 300 years; and
- some confusion amongst the participants and population as to what they were actually fighting for.

The revolt of Dom Boaventura was the last great rebellion of the “colonial” age. Dom Boaventura was the son of the *liurai* of the *reino* of Manufahi involved in the rebellions in 1894 and 1900 and in 1911 he became the *liurai* of Manufahi. At this point in East Timorese history, more of the population (particularly the higher ranking people in the kingdoms) were gaining missionary educations and thus understood more of the wider world and other issues. In 1910 a new tax system was introduced to the colony, which replaced the tributary *fintas* with a capitation tax. The *liurai* were now also forbidden to collect any other tribute or tax from their subjects, a measure which breached age-old traditions and community law [19, 20]. The tax obligation for the Manufahi *reino* was so high it was deemed impossible to collect [20]. In 1911 the commander of Suai administrative district (Portuguese administrative division) then announced that the head tax was to be increased further, so a number of local *liurai* decided to gather at Suai to request a remission. The Suai post was evacuated and the soldier carrying this news to Bobonaro was killed. The beginning of this rebellion is stated as being when the head of the Lieutenant of the post at Same in the *reino* of Manufahi was presented to his wife on the orders of Dom Boaventura. The revolt spread to other *reinos* including the chiefs in Dili. The Governor in Dili used *moradores* in addition to regular Portuguese, African, Goan and Malaccan soldiers to quell the rebellion, at the cost of many lives including many *liurai*. Following the rebellion, new *liurai* were promoted into the vacant positions

according to the Portuguese standards of loyalty and not by traditional methods or by ethnic rules of succession [20]. The **causes** and **triggers** of this rebellion are accepted as being very complex and of a generally anti-colonial nature, with the increase and change to the head tax being a primary **trigger**, and other **causes** from each *reino* being added to the mix. These include (summed up into categories in Appendix B)

- Native grievance on the prohibition of the cutting of sandalwood before a certain age and then a large tax placed on each tree cut
- Registration of livestock and coconut trees
- New tax on the slaughter of animals for festive occasions
- Change in the Portuguese flag when Portugal became a republic was resented as it was traditionally an object of worship
- Dutch incitement of Timorese to destabilise the Portuguese authority
- Unlike earlier revolts, the *liurai* were missionary educated and had a better understanding of the world and politics
- Resource issues resulting in higher taxes and less traditional use of land
- General anticolonial sentiments resulting from several administrators who were considered to be incompetent by the Timorese
- Bid for administrative power by traditional *liurai*, *topasse* and the Portuguese administration
- Traditional rivalries and relationships between *liurai* loyal to the Portuguese and those loyal to each other
- Introduction of capitation taxes (and immediate increases above what could be collected)
- Ban on traditional *liurai* subject tax collection

6.4 World War II 1942-1945

During World War II, Portugal and hence the East Timorese colony were neutral territories. However for the Dutch and Australian governments the strategic position of Timor was of great importance. For the Dutch, who were amongst the allies, the security of their colony in the west of the island, and for Australia the proximity to mainland Australia, were critical. As a result, in 1942 the Dutch and Australian Forces landed in West (Dutch) Timor and then effectively “invaded” Portuguese Timor – for their own protection. The politics of the matter aside, the Australians agreed to withdraw as soon as promised Portuguese forces arrived to protect the colony. Unfortunately there was some confusion on the part of the Portuguese before the arrival of their troops, as they believed the arriving forces were Portuguese, when in fact it was the main Japanese force and the Australians had already begun to withdraw. The Japanese had also conducted an extremely effective propaganda campaign in the West identifying themselves to the West Timorese as “big brothers”, and utilised the traditional east/west and anti-colonial sentiment to aid their transition to the island [20, 21].

There were some interesting **events** in this time, where some of the population in the east revolted against the Portuguese and the Japanese on different occasions. In the case of the rebellion “against” the Portuguese, it was not to support the Japanese, but to get back at other *liurai* who had supported Portugal in the 1911-12 rebellion of Dom Boaventura (see Section 6.3). This shows a case of the past (and traditions) not being easily forgotten by the Timorese. At the same time many of the East Timorese population both openly and covertly fought against the Japanese and supported the allies, with the Portuguese trying to remain neutral though having sympathies with the

allies [20, 21, 41, 52]. The local population (involved in this conflict and providing allied support) placed their lives at great risk to support what they felt was right and many lasting bonds were formed with Australia (via their memory of the Australian Troops) which were still seen during the operations from 1999, 57 years later[31], which continue today.

Interestingly, some of the West Timorese population covertly supported the Japanese in order to get back at the East Timorese and the Dutch – over traditional rivalries and the Dom Boaventura revolt and anti colonialism respectively [20].

The main **causes** of the acts of the native (and Portuguese) population were:

- Traditional rivalries and relationships
- External influences and manipulation by propaganda campaigns
- Feelings of who was considered the true “enemy”

6.5 Viqueque Rebellion 1959

This rebellion is not as well covered as many other rebellions of the time. It has been well known since shortly after the rebellion that the actual violence was planned and spread for several months before by Indonesian military officers who had claimed refuge in East Timor. They were planted as an external influence to cause trouble in the Portuguese colony by stirring up the anti-colonialists, the anti-Portuguese and the tribal elements for their own purposes. This riot started in the village of Uato Lari and spread to encompass the entire district of Viqueque. In this way it was hoped the riots would further destabilise the Portuguese colonial rule with the general dissatisfaction in the colony and allow Indonesia to step in to bring it under “control”. In order to quell the riot (which was completed within the week), the Portuguese administration raised a militia force from the neighbouring district and it ended with many killed and Timorese fighting Timorese [20, 62]. The primary **trigger** of this rebellion was an external influence inciting the **causes** of the long-held (400 years worth) desire for independence or self-governance from the main groups on the island and the anti-colonial sentiments.

6.6 Timor Civil War and Revolt by UDT 1975

In 1975 the “Timor civil war” erupted between those who supported the major political parties of FRETILIN (Frente Revolucionária de Timor Leste Independente) and UDT (União Democrática Timorense) [18, 20, 24, 42, 44, 45, 49, 55, 61, 62]. These were not the sole political parties, however for this description the others are not important. This **event** was incited by an external source (Indonesia) manipulating the beliefs and fears of one part of the population who supported UDT by feeding misinformation about their rival FRETILIN (this misinformation was based around leading UDT to believe FRETILIN would not set up a democratic government). Late in 1974 FRETILIN declared East Timor independent, shortly after the fall of the Portuguese crown and offer of independence by the new Portuguese Government. Within a few weeks the Indonesian government fed the misinformation to UDT in order to force the two parties to disagree and this resulted in the subsequent Timor “civil war” between the FRETILIN independence supporters and the Indonesian-backed UDT supporters. The UDT supporters believed in a different cause to that which Indonesia had planned [20, 45, 49, 50, 52]. They believed that Indonesia would help UDT oust the FRETILIN party by coming over the border and providing military assistance. Indonesia had assured UDT

that once this was complete they could withdraw to allow UDT to rule. During the “civil war” UDT members discovered the true nature of the Indonesian assistance. This war was ended by a revolt of UDT supporters in Dili against Indonesia when they realised after a few months they had been “duped” and they formed a new united front with FRETILIN against Indonesia in 1975. Some of the primary **causes** are:

- the need for independence and self governance of the Timorese
- traditional relationships being used by Indonesia to motivate people
- differing beliefs on how the country should proceed (traditionalist, Portuguese, mix of traditional and Portuguese under independence, full support to Indonesian assimilation)
- external influence by Indonesia on a push to Indonesian assimilation (although UDT was not a party supporting this, APODETI was a small minority party favouring this course of action)

6.7 Youth riots 1995

In September 1995, an Indonesian official visiting East Timor insulted the Catholic faith during a speech and “meet and greet” talks with locals. The East Timorese youth in Dili took great offence at this⁶ and a riot broke out between the Catholic East Timorese locals and the Muslim Indonesian immigrants, with attacks against Indonesian police as well as Indonesian immigrants and the destruction of their property [20, 61]. While the **trigger** for the riots was the speech given by the Indonesian official, there was significant underlying resentment fuelling the scale of violence seen. These riots persisted for several months and some of the primary **causes** were:

- anger over forced changes to religion, language and education
- anger over the transmigrants being relocated to the island and being given traditional lands – forcing further Timorese to be relocated
- offence taken at insults to the adopted Catholic faith and traditional animist beliefs
- frustration and recognition for human rights abuses and violent control of the “native” population

6.8 Christmas Riot 2002

Following the arrest of a high school student on the suspicion of murder, a group of students and teachers from the school protested at the Parliament House in Dili. They believed the East Timorese Police Service (ETPS) had arrested the student without due cause. The President made an agreement with these protestors that they would leave for the night and return the following day to continue their protest and discuss the issue with him. However, in the meantime other people arrived at the scene (many using the arrest as a vehicle to further their own cause [64]) and the situation turned violent. At this point the crowd (which had grown to 500) moved on to Police Headquarters – mostly to make a statement about their concerns (whether real or symbolic is unknown). Importantly, at this point most of the crowd had not been involved with the original negotiations and were not aware of the facts surrounding the arrest of the student. At this point the ETPS shot and killed two students and the ensuing rampage by the crowd focussed on foreign owned stores and the Muslim area as well as other areas of the city [51, 57, 64].

⁶ The Catholic church had by this stage been assimilated into East Timorese culture and was used in conjunction with traditional animist beliefs.

Details of the **event** and subsequent analyses showed that on top of the original **cause** for the protest which appeared to be resolved by the negotiations with the president, there were many other underlying issues in the community for which others joined into the protest (so that a main "**cause**" becomes difficult to identify). However it was clear that the various other issues canvassed at this protest were deep lying ones, which had been in the community for a long time. It is also important to note that the various elements of the population felt it necessary to use one protest **cause** as a vehicle for airing other grievances and that the protest rapidly descended into violence from that point onwards until it appears that the protestors had made their point. The **trigger** is the arrest of the student and below are listed some of the complex **causes** of this riot:

- unfair arrest – little public understanding of the arrest
- high unemployment and low economic development
- high expectations post-independence not met
- lack of "reward" and recognition for freedom fighters who felt betrayed by the new Government
- anger towards "foreigners" who were perceived to be making things worse. For example the UN employees whose salaries skewed the local economy by forcing up prices beyond the reach of most Timorese
- Government decisions regarding language and currency (another change rather than keeping the status quo) and other inequalities including salaries and opportunities between local Timorese and immigrants
- "out of touch" government
- general confusion as to why decisions were made and when life will get "better"
- general bitter feelings towards the Muslim faith and Indonesians who had insulted and changed the Timorese beliefs over a 25-year period
- some external incitement (Indonesian) taking the opportunity to destabilise the fragile new government

7. Lessons Learned

This report highlights several lessons of relevance to operations in urban environments, which. Of interest is the importance the Timorese "memory" appears to play as a source for **causes** to new **events**. This is relevant to urban operations in either Timor or other countries identified as having a similar societal "memory". If this memory is not accounted for, it may be used by the population (or used by another element to stimulate the population) in some **event** against a force operating in that environment – for seemingly no reason – though there is reason, it is just not understood. There is a need to understand the history of a region as issues which may relate to **events** occurring many years ago can lead to insurgences if a **trigger** is applied. This **trigger** may bear no relation to the underlying **causes**. Indeed the time gap in these societies between **event** and **causes** may make it exceedingly difficult to predict. This "memory" is also open to manipulation by external influences but could also be used to advantage by friendly forces.

Although this report does not focus specifically on urban areas, it is clear that most **events** (insurgences) originate or gain impetus only in areas of significant population density, namely urban environments.

This report has also shown for the Timorese population that the **stimulus** for an insurgency needs to be applied to areas where there is a sufficient density of the population for the **event** to have an effect. Therefore dispersing or isolating the population in an urban environment may be a mechanism for preventing or minimising significant **events** – although this could be construed as a negative action in itself and relies on the absence of modern communications and transport.

8. Conclusions

As a result of this baseline study we have identified a series of trends which have been consistent over the last 400 years as **causes of events** in East Timor. We have shown the utility of this type of historical analysis in providing insights to population reactions to given **stimuli**. This may also provide potential data in an appropriate format for any forecasting techniques such as trends impact analysis. There is no clear evidence of the spread of the rebellions in any direction or location over time, however; in general it appears these reactions can occur wherever there are centres of population.

An important outcome of this analysis is the identification of different “populations” (in terms of ethnicity, religion and education demographics) in East Timor over the last 400 years who have had similar reactions to applied **stimulus**. That is, for a similar or related set of **causes** the different populations (ethnicity, religion, education) have reacted in the same way; in most cases they rebelled. It appears that over the history of the island, if there was no **stimulus** to the population there was no change in the status quo. It is not possible to determine how often the **causes** occurred without **triggering** an **event** as these situations are of little general interest and hence not reported or recorded throughout history. This information would also provide valuable insights to the reaction and behaviour of the population for comparison.

The recurring **causes** and the evolution of previous **events** to become new **causes** appear to be important factors for the East Timorese population. The Timorese societal memory appears to be very long and issues from the past can very quickly become coupled with a current issue to create a **stimulus** for the population to react to. Similarly, any positive influences are also remembered. For example the positive memory of WWII allied support led to support given 57 years later.

The utility of the information provided from this type of historical analysis has allowed future work to concentrate case studies of a similar nature for other regional areas of interest.

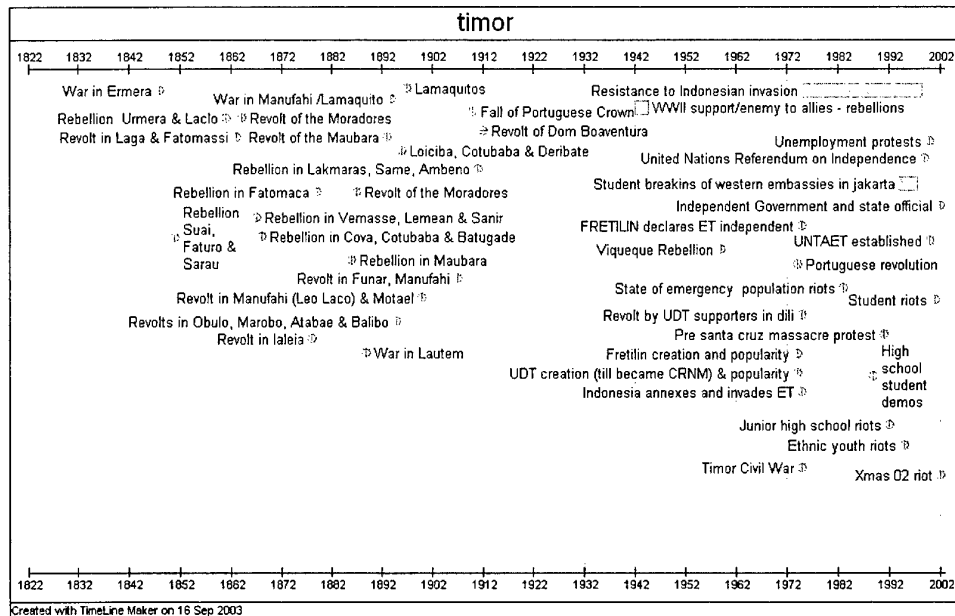
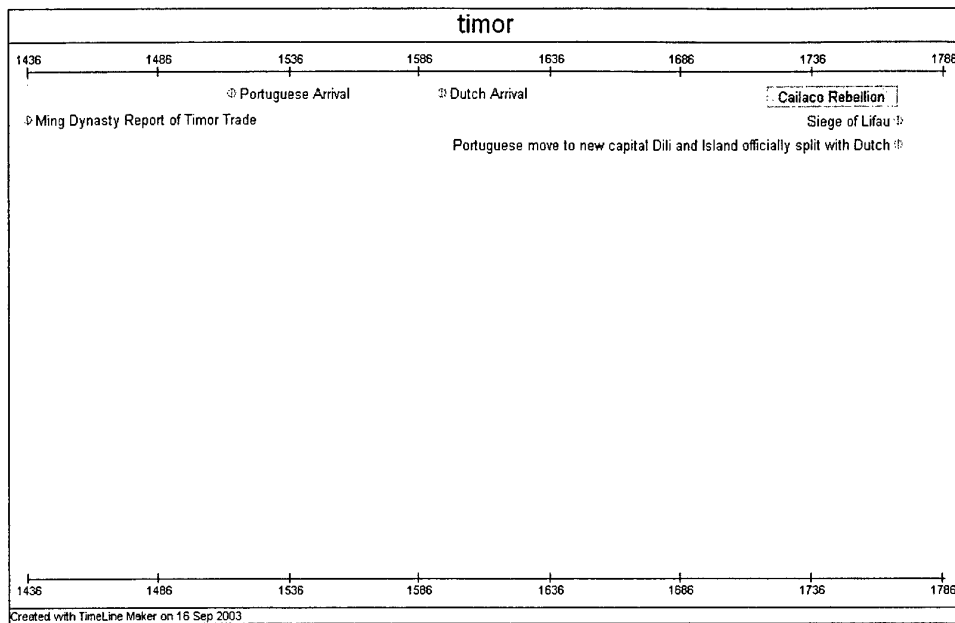
9. References

1. Dilegge, D.P. *Urban Analysis - A Need at all Levels of Operation and Command*, The Urban Operations Journal, <http://www.urbanoperations.com/urbanintel.htm>
2. Gulliver, P.J. *By the Edge of the Sword: A Consideration of the Challenges Inherent in Modern Urban Military Operations*. 2001, <http://www.urbanoperations.com/swordsedge.htm>
3. Hill, M. Sunspot.net, *Winning Iraqi hearts and Minds*, 2003, www.sunspot.net/news/opinion/perspective/bal-pe.war30mar30,0,328059.stories.html.
4. Jacobs, L.J.A. *Civil Affairs in Peace Operations*, Military Review, (July/August) 1998, <http://www-cgsc.army.mil/milrev/English/JulAug98/jacobs.htm>
5. Visco, E.P. *A History and Analysis of Operations Other than War: Ask Not "What Forces should we Deploy" But Rather "What is the Problem?"* Military Operations Research, 6(4):2001, p. 57-68.
6. Glenn, J.C. American Council for the UN University - the Millennium Project, *Futures Research Methodology V1.0* (CD production).
7. Gordon, T.J. American Council for the UN University - Millennium Project, *Trend Impact Analysis in Futures Research Methodology V1.0* (CD production).
8. Gordon, T.J. (ed.), American Council for the UN University - Millennium Project, *Environmental Scanning in Futures Research Methodology V1.0* (CD production).
9. Kent, S. 1994, *Words of Estimative Probability*, in *Sherman Kent and the Board of National Estimates: Collected essays*, D.P. Steury, Editor. CIA, Centre for the Study of Intelligence.
10. Lang, T. *An Overview of Four Futures Methodologies*, The Manoa Journal of Fried and Half-fried Ideas (about the future), 7:1995, <http://www.futures.hawaii.edu/j7/LANG.html>
11. Liebl, F. *The anatomy of complex societal problems and its implications for OR*, Journal of the Operational Research Society, 53:2002, p. 161-184.
12. McCue, B. *Another View of the "Small World"*, Social Networks, 24:2002, p. 121-133.
13. Schouten, M.J. *Antropologia e colonialismo em Timor portugues*, Lusotopie, 2001, p. 157-171.
14. Sorensen, L. and Vidal, R.V.V. *The Anatomy of Soft Approaches*, Documentos de Trabajo en Analisis Economico (Economics Analysis Working Papers), 1(8):2002, <http://eawp.economistascoruna.org/archives/vol1n8/index.asp>
15. Commonwealth of Australia, Defence Department, *Defence White Paper 2000*, <http://www.defence.gov.au/whitepaper/>.
16. Commonwealth of Australia, Defence Department, *Australia's National Security*, <http://www.defence.gov.au/ans2003/index.htm>.
17. Thomas, L.F. *De Ceuta a Timor*, 2003, <http://www.geocities.com/joseramelau/diasporatimorense/timor.htm>.
18. Ramerini, M. *Timor Leste/East Timor/Timor Est*, 2002, <http://www.geocities.com/Athens/Styx/6497/timor.html>.
19. Pelissier, R. 1996, *Timor en Guerre (Le Crocodile et les portugais 1847-1913)*: Orgeval, 368.
20. Gunn, G. 1999, *Timor Loro Sae 500 yrs*. 1st edition Livros Do Oriente, 323.
21. Lee, R. *Crisis in a Backwater 1941 in Portuguese Timor*, Lusotopie, 2000, p. 175-189.
22. Loureiro, R.M. *Discutindo a formação da presença colonial portuguesa em Timor*, Lusotopie, 2001, p. 143-155.
23. UDT Timorese Democratic Union, *Eastern Timor - History*, 2003, <http://www.fitini.net/udttimor/tim-hist.html>.
24. Solidamor, *History of East Timor Resistance*, 2003, <http://www.solidamor.org/english/content/history/resistance.htm>.
25. Timor Aid, *About East Timor*, 2003, http://www.timoraid.org/timortoday/html/about_east_timor.htm.

26. East Timor Governance and Public Administration, Census and Statistics Department, <http://www.gov.east-timor.org/old/statistics/>.
27. *Portuguese Timor*, in *Regional Surveys of the World - the Far East and Australasia*, 1968, Europa Publications. p. 571-2.
28. Revolution - Ammo for Freedom Fighters, *East Timorese Riot*, 2003, <http://www.boogieonline.com/revolution/multi/war/etimor/riots.html>.
29. US Department of State - Bureau of Democracy, Human Rights, and Labor, *International Religious Freedom Report*, 2003, <http://www.state.gov/g/drl/rls/irf/2001/5749.htm>.
30. *The Obscure History of East Timor*, 2002, <http://www.uc.pt/timor>.
31. 7 Section Alpha Coy 2RAR - Centre for Army Lessons, *A blue hat patrol conducted by 7 Section in Sulilako in January 2002*, <http://203.6.115.8/army/2rar/documents/7%20section%20in%20Sulilako%20in%20January.doc>.
32. Christian Solidarity Worldwide, *East Timor*, 2003, <http://www.cswusa.com/Countries/EastTimor.htm>.
33. Fact monster Almanac- countries, *East Timor Facts*, 2003, <http://www.factmonster.com/ipka/A0902237.html>.
34. The Aceh Times/ The Atjeh Times, *An Acehese Chronology - Timeline*, <http://www.achehtimes.com/timeline/>.
35. ABC Asia Pacific, *Countries in Focus - East Timor Religion*, 2003, <http://abcasiapacific.com/cause/religion/etimor.htm>.
36. Frommers, *In Depth History (Holland) - the reformation*, 2003, <http://www.frommers.com/destinations/amsterdam/0043030267.html>.
37. East Timor the Nation - Demographics, 2003, <http://www.sjc.uq.edu.au/projects/East%20Timor%20project/nation/demographics/index.html#population>.
38. Care International from UNICEF 2002, *Country Statistics: East Timor*, 2003, http://www.careinternational.org.uk/cares_work/where/easttimor/easttimor_stats.htm.
39. *East Timor*, in *Regional Surveys of the World: the Far East and Australasia*, 2003, Europa Publications. p. 421-441.
40. ETM Leste! Inc, Governo Timor Leste, <http://www.gov.east-timor.org/>.
41. Bamford, L.C.A.E. Australian War Memorial, *Brief Review of Ops in Timor to 12 Dec 42*, 2002, http://www.awm.gov.au/images/remembering1942/timor/AWM54_571_4_45.pdf.
42. BBC. *East Timor: timeline*, <http://www.tinor.org/>.
43. Budiardjo, C. *EAST TIMOR - THE FACTS*, in *New Internationalist*. 1994, <http://www.newint.org/issue253/facts.htm>.
44. Carey, P. *East Timor: Third World Colonialism and the Struggle for National identity*. 1996, Research Institute for the Study of Conflict and Terrorism.
45. Carey, P. and Cox, S. 1995, *Generations of resistance - East Timor*: Cassell, 120.
46. Carvalho, M.J.A.D. *East Timor and Portugal: Present Challenges, Reciprocal Visions: UNTIL*. p. 19, http://www.consulportugalsydney.org.au/_nonav/ALBARRAN.htm.
47. Collyer, L.R. *Human Factors in MOU: DSTO/LOD*. p. 13.
48. Coyle, R.G. *A System Description of Counter Insurgency Warfare*, Policy Sciences, 18:1985, p. 55-78.
49. ETRA. *East Timor Chronology of Events*, <http://www.etra.zip.com.au/histo.html>.
50. Greenlees, D. and Garran, R. 2002, *Deliverance: the inside story of East Timor's fight for freedom*: Allen & Unwin, 375.
51. Head, J. *Riots wake East Timor to reality*, in *BBC World News*. 2003, <http://news.bbc.co.uk/2/hi/asia-pacific/2653945.stm>.
52. Hoy, D. 1999, *Target Timor: an account of East Timor*: McDonald & Rusbrook, 114.

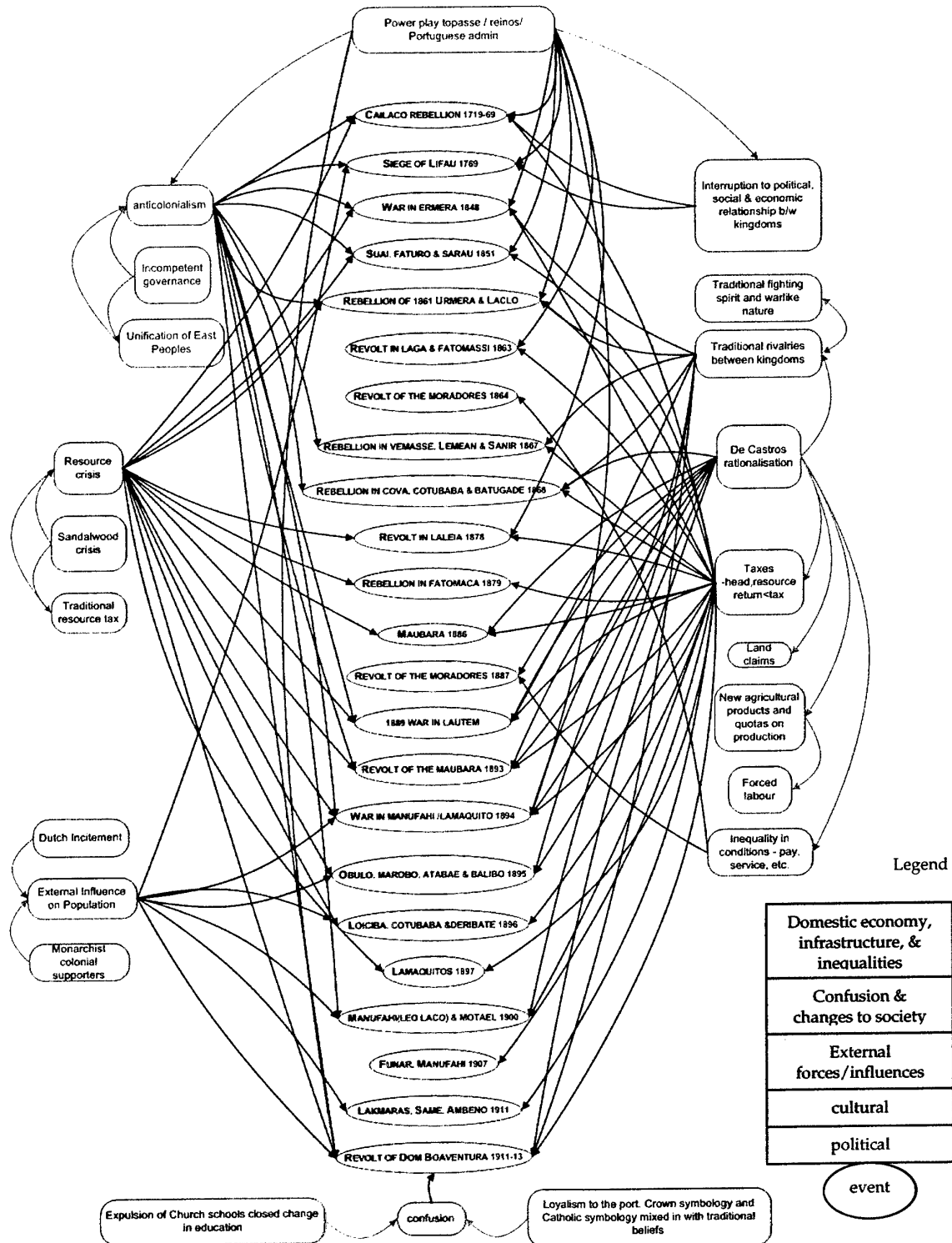
53. Hull, G. *About Sebastiao Aparicio da Silva Sjt*, 2002,
<http://www.ocs.mq.edu.au/~leccles/sebastiao.html>.
54. Kilcullen, D.J. *The Political Consequences of Military Operations in Indonesia 1945-99*, thesis in School of Politics - University College. 2000, University of New South Wales. p. 252.
55. Neales, S. *ET: Two decades of death, despair & torture in Indonesia's Achilles heel - slightly abridged*, in *Sydney Morning Herald*. 1995,
<http://www.hamline.edu/apakabar/basisdata/1995/10/22/0006.html>
56. Ramerini, M. *The Portuguese in the Moluccas and in the Lesser Sunda Islands*, 2002,
<http://www.geocities.com/Athens/Styx/6497/ternate.html>.
57. Reddy, S. Digital Freedom Network, *Violence erupts in East Timor despite UN presence*, 2003,
<http://www.dfn.org/news/east-timor/dili.htm>.
58. Soetjipto, H., Karamoy, W.A., and Wuryani, M.S. *Embassy of Indonesia in Canada, Province of East Timor*, 2003, <http://www.prica.org/indonesia/provinces/timur.html>.
59. Sousa, I.C.d. *The Portuguese Colonisation and the Problem of East Timorese Nationalism*, 2002,
<http://216.239.33.100/search?q=cache:sfqEJy5BFfIC:www.cean.u-bordeaux.fr/lusotopie/carneiroSousa.rtf+portuguese+colonial+history+timor&hl=en&ie=UTF-8>.
60. Sousa, I.C.d. *The Portuguese Colonization and the Problem of East Timorese Nationalism*, Lusotopie, 2001, p. 183-194,
<http://www.lusotopie.sciencespobordeaux.fr/carneiroSousa.rtf>
61. Tanter, R., Selden, M., and Shalom, S. 2001, *Bitter Flowers, Sweet Flowers: East Timor, Indonesia and the World Community*: Pluto Press Australia.
62. Taylor, J. 1991, *Indonesia's Forgotten War - The Hidden History of East Timor*: Pluto Press Australia, 230.
63. Timberlake, I. Agence France-Presse (AFP), *One Injured as thousands of East Timor job seekers besiege UN office*, 2003,
<http://www.reliefweb.int/w/rwb.nsf/s/A5A85550C2F56151C1256869005D436A>.
64. Titus, E. *Violence Stalks East Timor as 2001 Starts*, 2003,
http://www.geocities.com/timor_timur/pebruari01/TIM-0101.html.
65. Wykes, A. 1972, 1942: *the turning point*: Macdonald, 194.
66. Myers, D.G. 1999, *Social Psychology*: McGraw Hill.

Appendix A: Timeline of Events

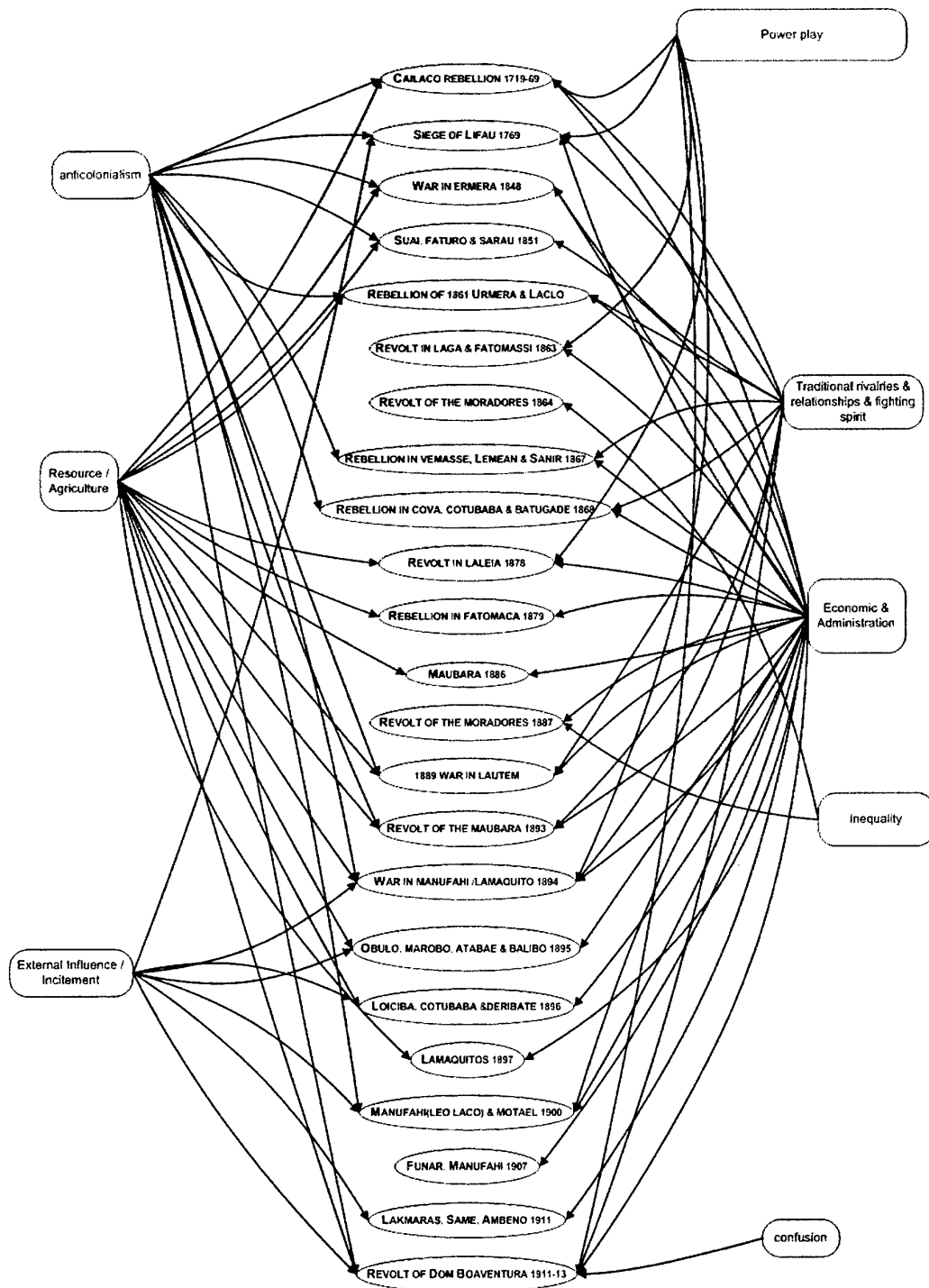


Appendix B: Events and Causes for Timor

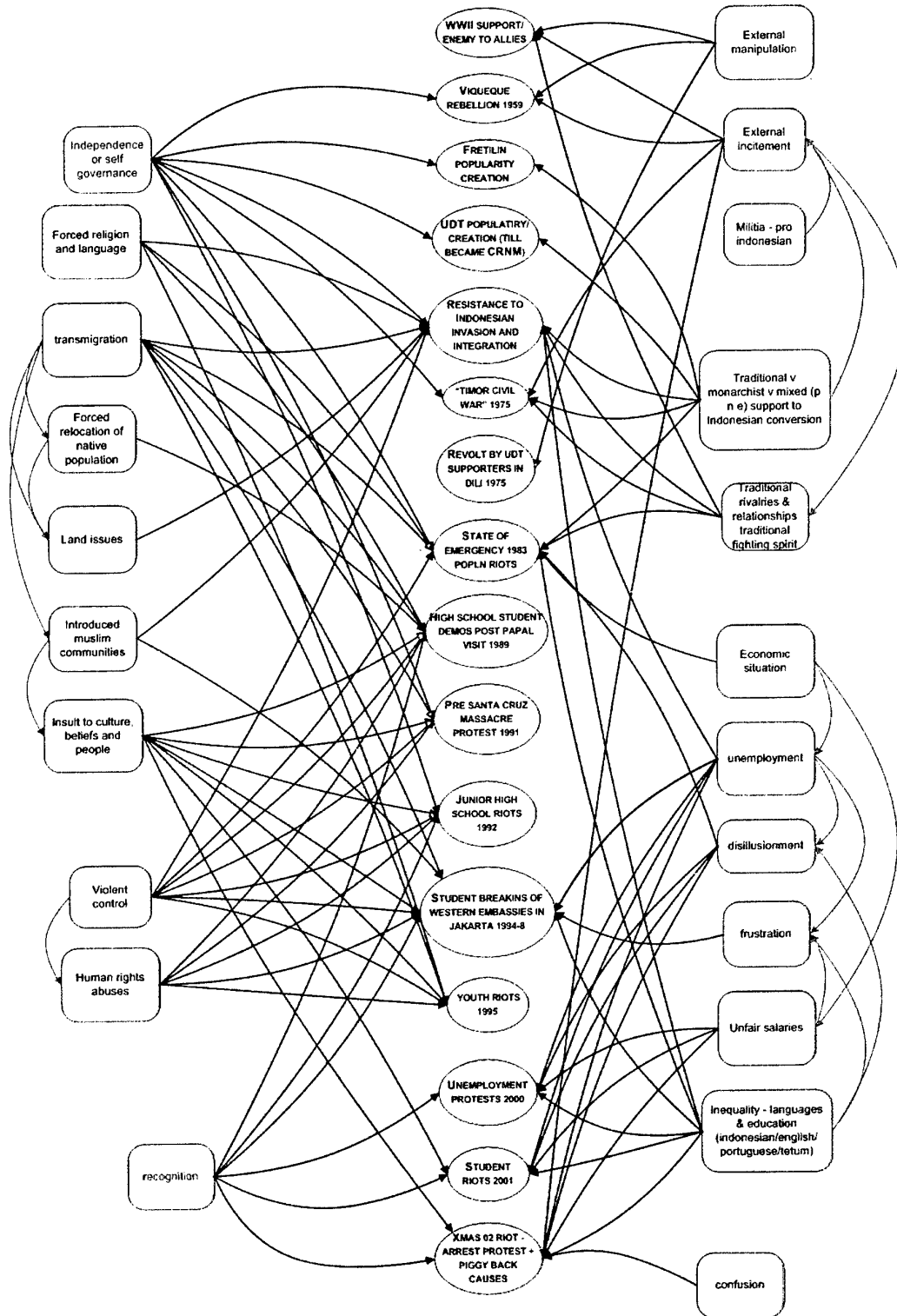
B.1. Map of events and causes for pre-1913 Timor – “detailed”



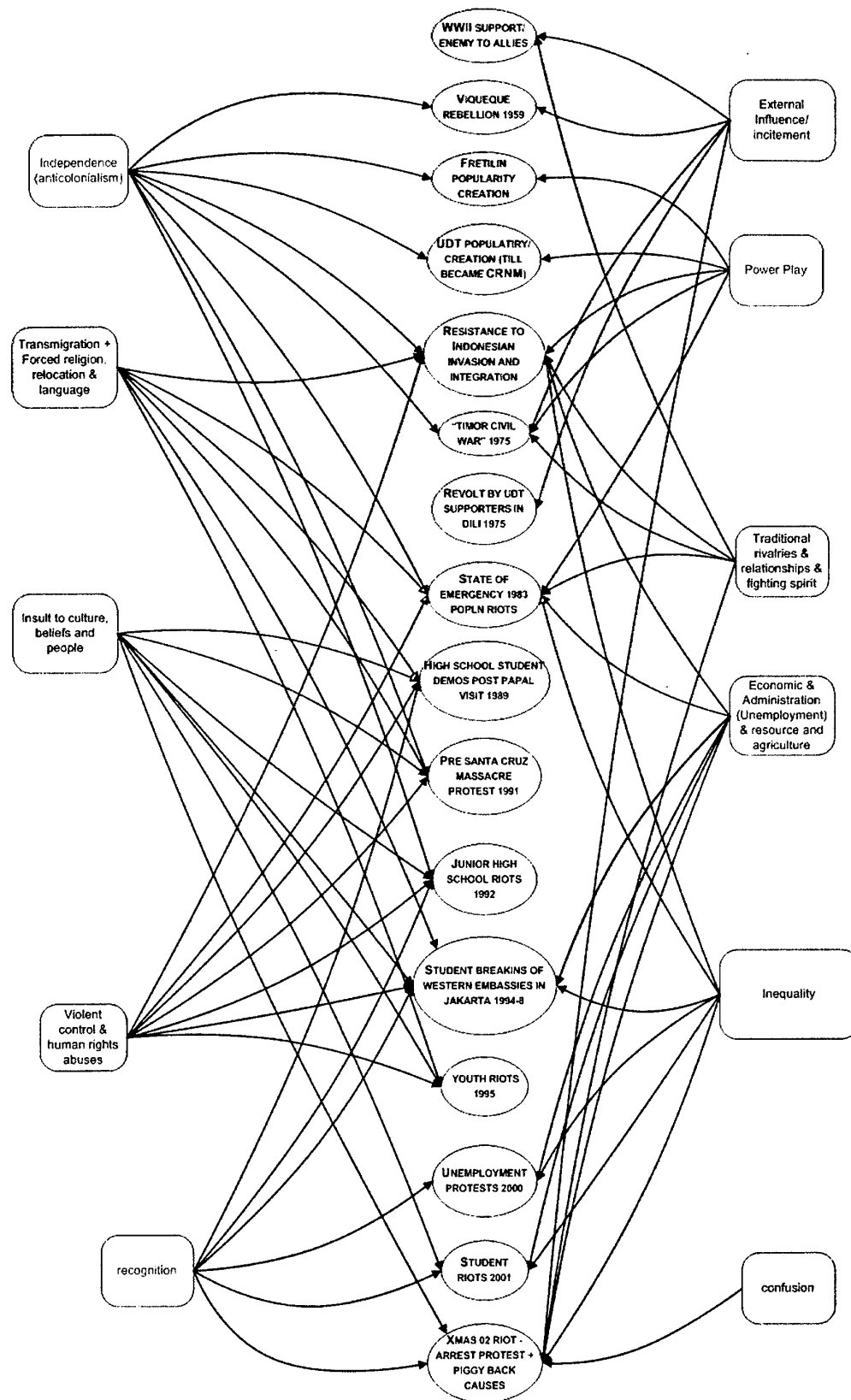
B.2. Map of events and causes for pre-1913 Timor - "distilled"



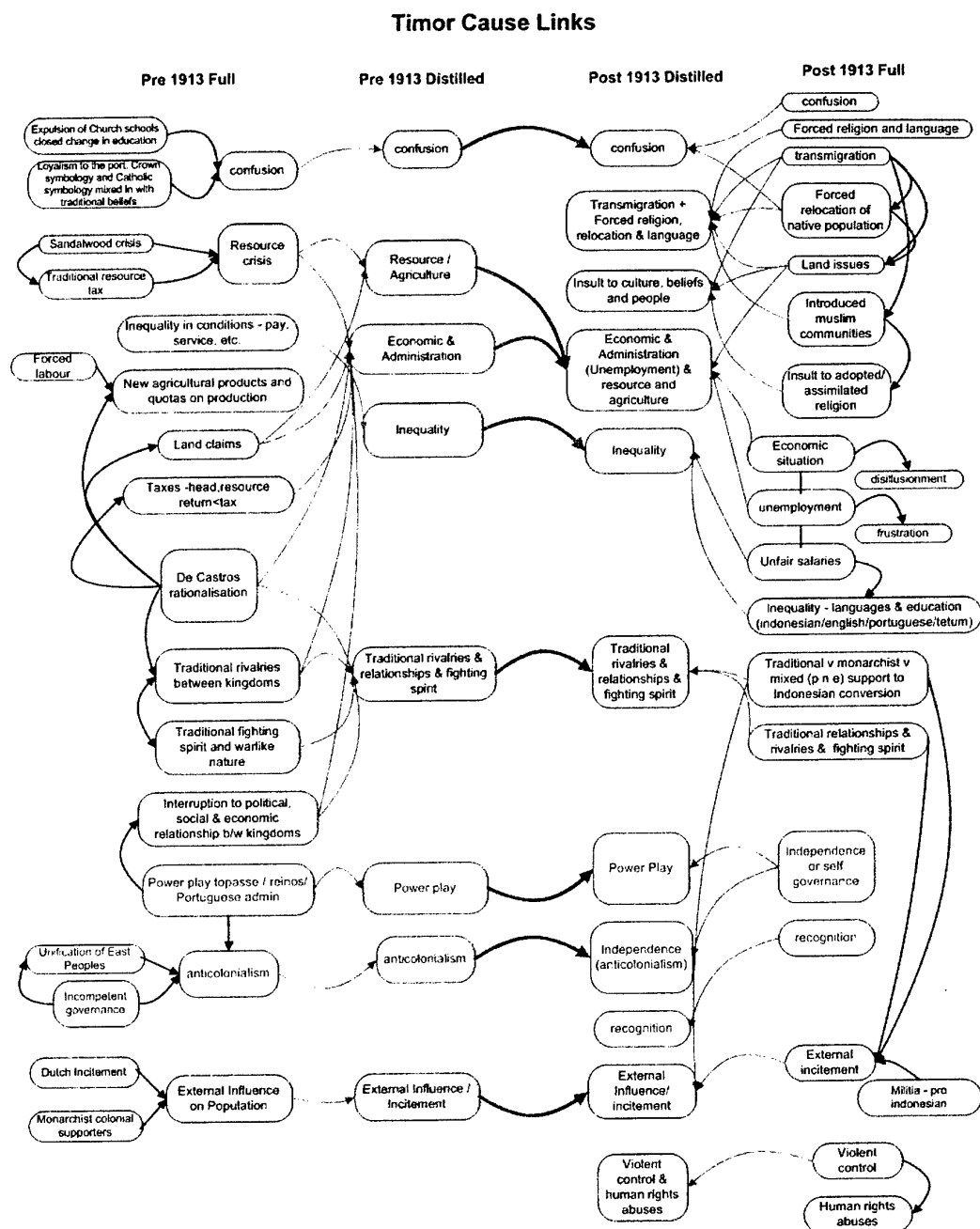
B.3. Map of events and causes for post-1913 Timor - "detailed"



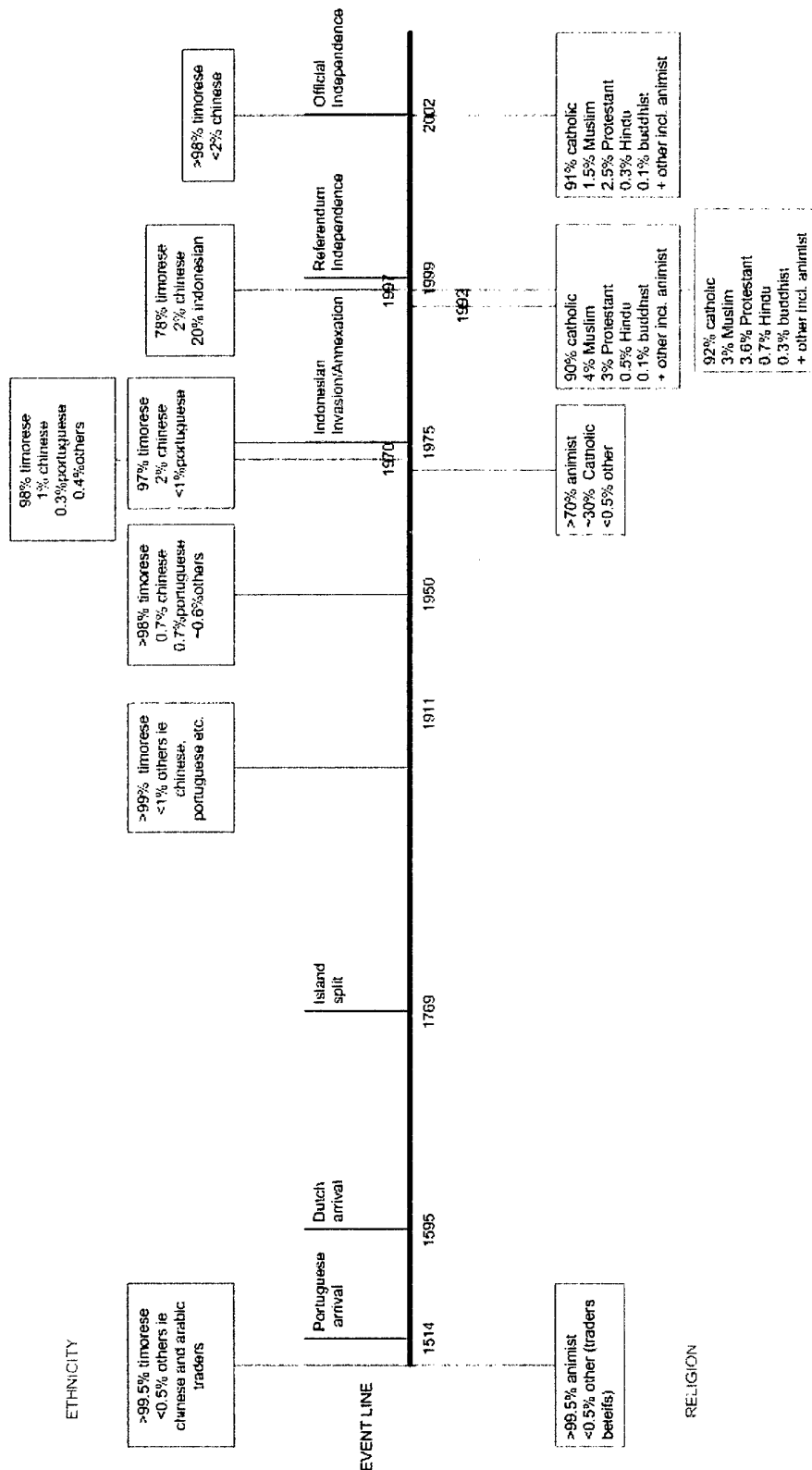
B.4. Map of events and causes for post-1913 Timor – “distilled”



B.5. Map of links between causes for Timor



Appendix C: Ethnicity and Religion Overlays Over Time



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Patricia Dexter

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**DEFENCE SCIENCE AND TECHNOLOGY ORGANISATION
DOCUMENT CONTROL DATA**

1. PRIVACY MARKING/CAVEAT (OF DOCUMENT)

2. TITLE

Historical Analysis of Population Reactions to Stimuli
- A Case Study of East Timor

3. SECURITY CLASSIFICATION (FOR UNCLASSIFIED REPORTS THAT ARE LIMITED RELEASE USE (L) NEXT TO DOCUMENT CLASSIFICATION)

Document (U)
Title (U)
Abstract (U)

4. AUTHOR(S)

Patricia Dexter

5. CORPORATE AUTHOR

Systems Sciences Laboratory
PO Box 1500
Edinburgh South Australia 5111 Australia

6a. DSTO NUMBER
DSTO-TR-1553

6b. AR NUMBER
AR 013-033

6c. TYPE OF REPORT
Technical Report

7. DOCUMENT DATE
February 2004

8. FILE NUMBER
E9505-25-113

9. TASK NUMBER
ARM 03/102

10. TASK SPONSOR
COMD LWDC

11. NO. OF PAGES
36

12. NO. OF REFERENCES
71

13. URL on the World Wide Web

<http://www.dsto.defence.gov.au/corporate/reports/DSTO-TR-1553.pdf>

14. RELEASE AUTHORITY

Chief, Land Operations Division

15. SECONDARY RELEASE STATEMENT OF THIS DOCUMENT

Approved for public release

OVERSEAS ENQUIRIES OUTSIDE STATED LIMITATIONS SHOULD BE REFERRED THROUGH DOCUMENT EXCHANGE, PO BOX 1500, EDINBURGH, SA 5111

16. DELIBERATE ANNOUNCEMENT

No Limitations

17. CITATION IN OTHER DOCUMENTS

Yes

18. DEFTEST DESCRIPTORS

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19. ABSTRACT

This study provides a baseline investigation for determining population reactions to given stimuli in a historical context. Historical data analysis and qualitative data analysis techniques are applied to the last 500 years of insurgences on East Timor. Links and trends between events and stimuli as causes and triggers are drawn giving a preliminary dataset for any future trends impact analysis. In addition some general population reactions for East Timor are established.